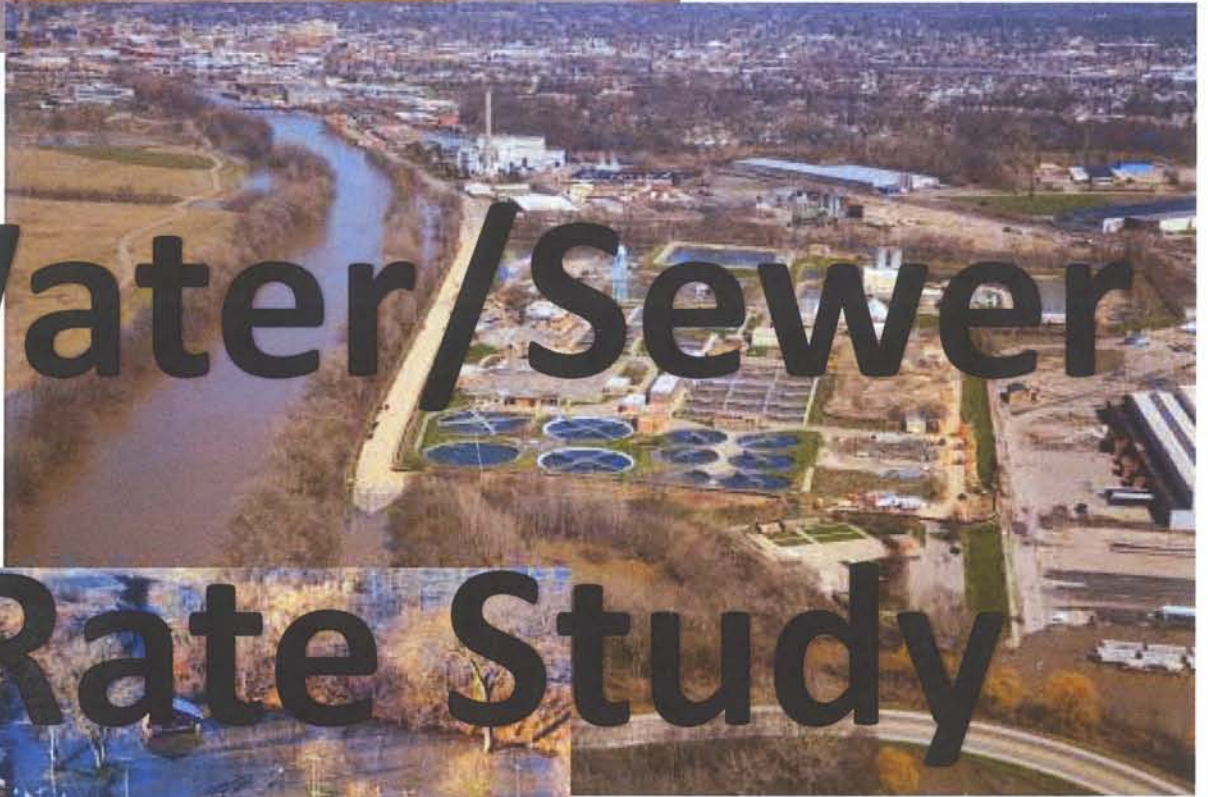




City of Grand Rapids, Michigan

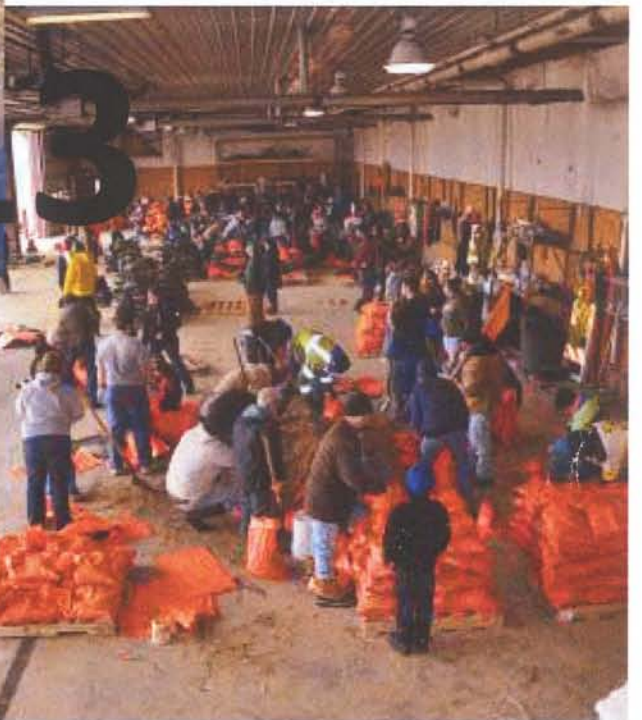


Water/Sewer

Rate Study



2013



Final



MEMORANDUM

CITY OF GRAND RAPIDS

DATE: January 8, 2014

TO: Eric R. DeLong
Deputy City Manager

FROM: Geri D. Eye, CPA 
Utility Financial Officer

SUBJECT: 2013 WATER/SEWER RATE STUDY – FINAL REPORT

The final study, setting water and sewer rates effective January 1, 2014, for Grand Rapids and the retail and wholesale communities it serves, is submitted herein. A table of contents immediately precedes the report's sections and lists the respective tasks performed in reviewing the Water Supply System's and Sewage Disposal System's operating and financial performance. The annual study considers variations in customer base, usage, and operating and capital costs by community and calculates recommended commodity and service rates based upon adherence to: (a) the uniform rate-setting methodology established in 1976-77 for customer communities not party to the uniform water and sewer service agreements; and (b) rate methodology changes contractually agreed in the uniform water and sewer service agreements for Utility Advisory Board (UAB) member customer communities. The methodology yields consistent performance in providing for the long-term needs of the water and sewage systems and satisfying debt service coverage pursuant to the systems' master bond ordinance covenants.

This year's review marks the 36th annual water/sewer rate study report and resulted in a water rate decrease and a sewer rate increase as follows:

1. Water Supply System revenue requirements decreased \$1,735,395 or 4.30% less than revenue generated by existing rates and charges and now includes a revenue credit for the income earned on water tank rental to cellular and Internet service providers. Slightly lower operating costs, higher integrated connection fee revenues and other revenue credits, increased average billed volume, and a larger customer base all contributed to the favorable water rate change.
2. Sewage Disposal System revenue requirements increased \$1,177,402 or 2.46% more than revenue generated by existing rates and charges and properly excludes costs associated with the spring 2013 flood event expected to be reimbursed by FEMA. Slightly higher operating costs, lower surcharge revenues, and decreased billed volume contributed to the sewer rate increase.

The final rate study continues to incorporate provisions of the third amendment to the uniform service agreements with customer communities, which eliminates penalty fee credits from retail revenue requirements to fund the Individual Circuit Breaker (ICB) and the City and Customer Community Circuit Breaker (CCCCB). This amendment generated \$148,743 to support the ICB, the program aimed to assist retail customers requiring assistance in payment of their water/sewer bills, and represents a \$5,088 increase from the prior rate study. This amendment also generated sufficient funding to provide full water and sewer circuit breaker relief to Walker, Kentwood, Cascade, Grand Rapids Township, Tallmadge, and Wright under the CCCCCB, a program intended to limit each retail service area's revenue requirement change to a level in line with the overall systems' average change.

Four schedules supplement and immediately follow this memo. The first schedule summarizes the revenue requirement changes by customer community. The second and third schedules show water and sewer rate adjustment impacts to typical domestic and commercial customers with the system average quarterly consumption in each retail community. They also include a comparison of the approximate monthly charge for Wright Township's residential equivalent unit (REU) rate structure. The final schedule shows comparative water and sewer monthly service and commodity rate adjustments for the City's wholesale customer communities.

Announcement of the proposed 2014 water and sewer rates to the UAB partners and other customer communities was made November 14, 2013, and the City Commission approved the customer community rates by resolution on December 17, 2013.

Public hearings for water and sewer rates and charges in Grand Rapids were held on December 3, 2013, and the City Commission approved final adoption of the water and sewer ordinance amendments on December 17, 2013.

Attachments

**CITY OF GRAND RAPIDS, MICHIGAN
2013 FINAL WATER/SEWER RATE STUDY
SUMMARY OF REVENUE REQUIREMENT CHANGES
FOR RATES EFFECTIVE JANUARY 1, 2014
January 8, 2014**

	WATER (1)		SEWER (1)	
	AMOUNT	PERCENT	AMOUNT	PERCENT
GRAND RAPIDS	\$ (965,560)	-4.03%	\$ 738,617	2.25%
WALKER	(124,627)	-3.88%	108,859	2.36%
KENTWOOD	(227,165)	-5.29%	98,572	2.74%
CASCADE TWP	(118,885)	-3.88%	54,928	2.74%
GRAND RAPIDS TWP (2)	(96,174)	-4.42%	60,072	2.60%
TALLMADGE TWP	(5,055)	-3.88%	7,111	2.74%
WRIGHT TWP (2)	NA	NA	(3,231)	-1.31%
EAST GRAND RAPIDS	(55,853)	-6.16%	67,271	11.11%
ADA TWP	(92,563)	-7.32%	27,471	2.50%
OTTAWA COUNTY	(49,514)	-3.54%	NA	NA
GAINES TWP	NA	NA	4,532	3.12%
SYSTEM	\$ (1,735,395)	-4.30%	\$ 1,177,402	2.46%

(1) Change in revenue requirements based on revenues currently generated from rates, customer base and volumes reported in the preliminary rate study (Includes consideration for relief from CCCCCB).

(2) Grand Rapids Twp contributed \$3,200 in 2013 Rate Study for 2014 sewer revenue requirements & rates.
Wright Twp contributed \$10,000 in 2013 Rate Study for 2014 sewer revenue requirements & rates.

DISCLOSE RELIEF PROVIDED BY CITY & CUSTOMER COMMUNITY CIRCUIT BREAKER (CCCCB)

	WATER		SEWER	
	AMOUNT	PERCENT	AMOUNT	PERCENT
SYSTEM CHANGE- ABOVE	\$ (1,735,395)	-4.30%	\$ 1,177,402	2.46%
ADD: CCCCCB RELIEF	168,143	0.42%	133,698	0.28%
SYSTEM CHANGE- WITHOUT RELIEF	<u>\$ (1,567,252)</u>	<u>-3.88%</u>	<u>\$ 1,311,100</u>	<u>2.74%</u>

CITY OF GRAND RAPIDS, MICHIGAN
2013 FINAL WATER/SEWER RATE STUDY
IMPACT OF RATE ADJUSTMENTS ON DOMESTIC USERS
BY CUSTOMER COMMUNITY *
January 8, 2014

	APPROXIMATE QUARTERLY BILL		CHANGE	
	2013	2014	DOLLARS	PERCENT
GRAND RAPIDS				
WATER	\$ 74.22	\$ 71.00	\$ (3.22)	-4.34%
SEWER	91.73	94.56	2.83	3.09%
	<u>\$ 165.95</u>	<u>\$ 165.56</u>	<u>\$ (0.39)</u>	-0.24%
BASE RATIO	1.00	1.00		
WALKER				
WATER	\$ 78.37	\$ 74.95	\$ (3.42)	-4.36%
SEWER	129.28	132.10	2.82	2.18%
	<u>\$ 207.65</u>	<u>\$ 207.05</u>	<u>\$ (0.60)</u>	-0.29%
RATIO TO GR	1.25	1.25		
KENTWOOD				
WATER	\$ 85.30	\$ 80.06	\$ (5.24)	-6.14%
SEWER	55.85	56.96	1.11	1.99%
	<u>\$ 141.15</u>	<u>\$ 137.02</u>	<u>\$ (4.13)</u>	-2.93%
RATIO TO GR	0.85	0.83		
CASCADE TWP				
WATER	\$ 115.14	\$ 110.02	\$ (5.12)	-4.45%
SEWER	131.05	134.21	3.16	2.41%
	<u>\$ 246.19</u>	<u>\$ 244.23</u>	<u>\$ (1.96)</u>	-0.80%
RATIO TO GR	1.48	1.48		
GRAND RAPIDS TWP- Contribution of \$5,600 for 2013, \$3,200 for 2014.				
WATER	\$ 91.25	\$ 86.97	\$ (4.28)	-4.69%
SEWER	116.46	119.28	2.82	2.42%
	<u>\$ 207.71</u>	<u>\$ 206.25</u>	<u>\$ (1.46)</u>	-0.70%
RATIO TO GR	1.25	1.25		
TALLMADGE TWP				
WATER	\$ 114.22	\$ 108.56	\$ (5.66)	-4.96%
SEWER	261.35	268.08	6.73	2.58%
	<u>\$ 375.57</u>	<u>\$ 376.64</u>	<u>\$ 1.07</u>	0.28%
RATIO TO GR	2.26	2.27		

* THE COMPARISONS ABOVE ARE BASED ON SYSTEM AVERAGE DOMESTIC CUSTOMER
QUARTERLY CONSUMPTION OF : WATER- 25.00 UNITS OR 18,700 GALLONS
SEWER - 16.00 UNITS OR 11,968 GALLONS
NO. OF MONTHS: 3

Note: The average water consumption depicted above reflects an increase of two (2) units from last year's rate study.
Sewer reflects a decrease of two (2) units from last year's rate study. The average quarterly consumption for water
and sewer last year was 23 and 18 units, respectively.

REU (RESIDENTIAL EQUIVALENT UNIT) CUSTOMER COMMUNITY- APPROXIMATE QUARTERLY BILL

WRIGHT TWP- Contribution of \$0 for 2013, \$10,000 for 2014.

SEWER (No. of REU 1.00)	<u>\$ 185.64</u>	<u>\$ 183.21</u>	<u>\$ (2.43)</u>	-1.31%
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CITY OF GRAND RAPIDS, MICHIGAN
2013 FINAL WATER/SEWER RATE STUDY
IMPACT OF RATE ADJUSTMENTS ON COMMERCIAL USERS
BY CUSTOMER COMMUNITY *
January 8, 2014

	<u>APPROXIMATE QUARTERLY BILL</u>		<u>CHANGE</u>	
	<u>2013</u>	<u>2014</u>	<u>DOLLARS</u>	<u>PERCENT</u>
GRAND RAPIDS				
WATER	\$ 452.64	\$ 434.98	\$ (17.66)	-3.90%
SEWER	737.82	734.55	(3.27)	-0.44%
	<u>\$ 1,190.46</u>	<u>\$ 1,169.53</u>	<u>\$ (20.93)</u>	-1.76%
BASE RATIO	1.00	1.00		
WALKER				
WATER	\$ 434.03	\$ 417.86	\$ (16.17)	-3.73%
SEWER	690.30	706.65	16.35	2.37%
	<u>\$ 1,124.33</u>	<u>\$ 1,124.51</u>	<u>\$ 0.18</u>	0.02%
RATIO TO GR	0.94	0.96		
KENTWOOD				
WATER	\$ 440.78	\$ 417.67	\$ (23.11)	-5.24%
SEWER	491.91	505.23	13.32	2.71%
	<u>\$ 932.69</u>	<u>\$ 922.90</u>	<u>\$ (9.79)</u>	-1.05%
RATIO TO GR	0.78	0.79		
CASCADE TWP				
WATER	\$ 597.75	\$ 574.85	\$ (22.90)	-3.83%
SEWER	672.03	690.78	18.75	2.79%
	<u>\$ 1,269.78</u>	<u>\$ 1,265.63</u>	<u>\$ (4.15)</u>	-0.33%
RATIO TO GR	1.07	1.08		
GRAND RAPIDS TWP- Contribution of \$5,600 for 2013, \$3,200 for 2014.				
WATER	\$ 486.61	\$ 465.21	\$ (21.40)	-4.40%
SEWER	606.81	623.16	16.35	2.69%
	<u>\$ 1,093.42</u>	<u>\$ 1,088.37</u>	<u>\$ (5.05)</u>	-0.46%
RATIO TO GR	0.92	0.93		
TALLMADGE TWP				
WATER	\$ 876.29	\$ 841.30	\$ (34.99)	-3.99%
SEWER	2,287.47	2,350.05	62.58	2.74%
	<u>\$ 3,163.76</u>	<u>\$ 3,191.35</u>	<u>\$ 27.59</u>	0.87%
RATIO TO GR	2.66	2.73		

* THE COMPARISONS ABOVE ARE BASED ON SYSTEM AVERAGE COMMERCIAL CUSTOMER
QUARTERLY CONSUMPTION OF : WATER- 230.00 UNITS OR 172,040 GALLONS
SEWER - 207.00 UNITS OR 154,836 GALLONS
NO. OF MONTHS: 3

REU (RESIDENTIAL EQUIVALENT UNIT) CUSTOMER COMMUNITY- APPROXIMATE QUARTERLY BILL

WRIGHT TWP- Contribution of \$0 for 2013, \$10,000 for 2014.

SEWER (No. of REU 1.00)	<u>\$ 185.64</u>	<u>\$ 183.21</u>	<u>\$ (2.43)</u>	-1.31%
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CITY OF GRAND RAPIDS, MICHIGAN
2013 FINAL WATER/SEWER RATE STUDY
IMPACT OF RATE ADJUSTMENTS ON WHOLESALE USERS
January 8, 2014

	<u>2013</u>	<u>2014</u>	<u>PERCENTAGE CHANGE</u>
EAST GRAND RAPIDS			
WATER - SERVICE (MONTHLY)	\$ 15,702.00	\$ 14,091.00	-10.26%
- COMMODITY (100 CF)	1.18	1.12	-5.08%
SEWER - SERVICE (MONTHLY)	1,604.00	1,540.00	-3.99%
- COMMODITY (MG)	1,396.00	1,558.00	11.60%
 ADA TWP			
WATER - SERVICE	\$ 34,722.00	\$ 29,726.00	-14.39%
- COMMODITY	1.30	1.25	-3.85%
SEWER - SERVICE	45,912.00	42,700.00	-7.00%
- COMMODITY	1,763.00	1,975.00	12.02%
 OTTAWA COUNTY			
WATER - SERVICE	\$ 170.00	\$ -	-100.00%
- COMMODITY	1.26	1.22	-3.17%
 GAINES TWP			
SEWER - SERVICE	\$ 1,574.00	\$ 1,333.00	-15.31%
- COMMODITY	1,310.00	1,387.00	5.88%

NOTE: Monthly defined as 1/12th of 365 days.

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ANNUAL RATE REVIEW**

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**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ANNUAL RATE REVIEW**

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**CITY OF GRAND RAPIDS, MICHIGAN
FINAL CONSIDERATIONS
ANNUAL WATER/SEWER RATE REVIEW**

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**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
SYSTEM ADDITIONS AND IMPROVEMENTS
FOR THE YEAR ENDED JUNE 30, 2013
TASKS NO. 1, 2, & 3**

COMMUNITY	LOCAL		INTERMEDIATE		PRIMARY		TOTALS	
	FEET	MILES	FEET	MILES	FEET	MILES	FEET	MILES
Grand Rapids								
Construction	14,006	2.65	11,761	2.23	80	0.02	25,847	4.90
Abandonment	(15,302)	(2.90)	(11,152)	(2.11)	(80)	(0.02)	(26,534)	(5.03)
CSO Construction	12,945	2.45	651	0.12	0	0.00	13,596	2.57
CSO Abandonment	(12,208)	(2.31)	0	0.00	0	0.00	(12,208)	(2.31)
	(559)	(0.11)	1,260	0.24	0	0.00	701	0.13
Kentwood								
Construction	0	0.00	0	0.00	0	0.00	0	0.00
Abandonment	0	0.00	0	0.00	0	0.00	0	0.00
	0	0.00	0	0.00	0	0.00	0	0.00
Cascade Twp.								
Construction	0	0.00	0	0.00	0	0.00	0	0.00
Abandonment	0	0.00	0	0.00	0	0.00	0	0.00
	0	0.00	0	0.00	0	0.00	0	0.00
G.R. Twp.								
Construction	6,920	1.31	231	0.04	0	0.00	7,151	1.35
Abandonment	0	0.00	(229)	(0.04)	0	0.00	(229)	(0.04)
	6,920	1.31	2	0.00	0	0.00	6,922	1.31
Tallmadge Twp.								
Construction	0	0.00	0	0.00	0	0.00	0	0.00
Abandonment	0	0.00	0	0.00	0	0.00	0	0.00
	0	0.00	0	0.00	0	0.00	0	0.00
Walker								
Construction	0	0.00	0	0.00	0	0.00	0	0.00
Abandonment	0	0.00	0	0.00	0	0.00	0	0.00
	0	0.00	0	0.00	0	0.00	0	0.00
TOTAL	6,361	1.20	1,262	0.24	0	-	7,623	1.44

	CONTRIBUTIONS		
	COMM	OTHER	TOTAL
Integrated	\$ -		\$ -
Grand Rapids	267,089		267,089
Kentwood	-		-
Cascade Twp.	-		-
Grand Rapids Twp.	516,004		516,004
Tallmadge Twp.	-		-
Walker	-		-
TOTAL	\$ 783,093	\$ -	\$ 783,093

CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
OPERATING EXPENSE ALLOCATION BY COST CENTER - TASK #4, PART 1
FISCAL YEAR ENDED JUNE 30, 2013

ACTIVITY CODE	ACTIVITY	EXPENSE BY ACTIVITY	FILTRATION PLANT	PUMPING STATIONS		WATERMAINS			RETAIL CUSTOMER METERING	ENGIN. SERVICES	ADMIN. EXPENSE
				PRIMARY	INTERM.	PRIMARY TRANSPORT	INTERMED. TRANSPORT	LOCAL DISTRIBUTION			
0430	TREASURER-CUSTOMER SERVICE	\$ 455,112							\$ 455,112		
4312	WATER-CUSTOMER SERVICE *	2,077,749							2,077,749		
4315	ENGINEERING	1,018,319								1,018,319	
4320	COLDBROOK CONTROL	1,293,269		1,293,269							
4322	COLDBROOK DISTRIBUTION	2,307,426		741,222	1,566,204						
4331	FIELD OPERATIONS	5,748,493				287,597	1,473,109	3,987,787			
4342	FILTRATION	6,645,564	6,645,564								
	SUBTOTAL OPERATING EXPENSE	19,545,932	6,645,564	2,034,491	1,566,204	287,597	1,473,109	3,987,787	2,532,861	1,018,319	-
4311	ADMINISTRATION	2,705,421									2,705,421
	TOTAL	\$ 22,251,353	\$ 6,645,564	\$ 2,034,491	\$ 1,566,204	\$ 287,597	\$ 1,473,109	\$ 3,987,787	\$ 2,532,861	\$ 1,018,319	\$ 2,705,421

* Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

METHOD OF DISTRIBUTION

0430	TREASURER-CUSTOMER SERVICE	100.000%							100.000%		
4312	WATER-CUSTOMER SERVICE	100.000%							100.000%		
4315	ENGINEERING	100.000%								100.000%	
4320	COLDBROOK CONTROL	100.000%		100.000%							
4322	COLDBROOK DISTRIBUTION	100.000%		32.120%	67.880%						
4331	FIELD OPERATIONS	100.000%				5.003%	25.626%	69.371%			
	TOTAL MILES OF MAIN	1,164.84				58.28	298.50	808.06			
4342	FILTRATION	100.000%	100.000%								
4311	ADMINISTRATION	100.000%									100.000%

CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
OPERATING EXPENSE ALLOCATION BY GOVERNMENTAL UNIT - TASK #4, PART 2
FISCAL YEAR ENDED JUNE 30, 2013

COST CENTER	EXPENSE BY COST CENTER	INTEGRATED SYSTEM	RETAIL						WHOLESALE		
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	CITY OF EAST GR	COUNTY OF OTTAWA	ADA TOWNSHIP
FILTRATION PLANT	\$ 6,645,564	\$ 6,645,564									
PUMPING STATIONS:											
A. PRIMARY TRANSPORT	2,034,491	2,034,491									
B. INTERMEDIATE TRANSPORT	1,566,204		1,222,326	40,348	303,530	-	-	-			
WATERMAINS:											
A. PRIMARY TRANSPORT	287,597		236,324	15,890	22,502	8,291	4,590	-	-	-	-
B. INTERMEDIATE TRANSPORT	1,473,109		564,230	309,279	267,325	191,769	120,265	20,241	-	-	-
C. LOCAL DISTRIBUTION	3,987,787		2,939,716	309,412	270,053	212,709	244,053	11,844	-	-	-
RETAIL CUSTOMER METERING	2,532,861		1,917,857	206,302	163,825	108,077	131,658	5,142			
SUBTOTAL OPERATING EXPENSE	18,527,613	8,680,055	6,880,453	881,231	1,027,235	520,846	500,566	37,227	-	-	-
ENGINEERING SERVICES	1,018,319	477,082	378,163	48,431	56,456	28,625	27,515	2,047	-	-	-
ADMINISTRATIVE EXPENSE	2,705,421	1,267,490	1,004,685	128,670	149,989	76,049	73,100	5,438	-	-	-
TOTAL	\$ 22,251,353	\$ 10,424,627	\$ 8,263,301	\$ 1,058,332	\$ 1,233,680	\$ 625,520	\$ 601,181	\$ 44,712	\$ -	\$ -	\$ -

C-3

METHOD OF DISTRIBUTION

FILTRATION PLANTS	100.00%	100.00%									
PUMPING STATIONS											
A. PRIMARY TRANSPORT	100.00%	100.00%									
B. INTERMEDIATE TRANSPORT	100.00%		78.044%	2.576%	19.380%						
MEMO											
WATERMAINS											
TOTAL MILES: 1,164.84											
A. PRIMARY TRANSPORT	100.000%		82.172%	5.525%	7.824%	2.883%	1.596%				
MILES 58.28			47.89	3.22	4.56	1.68	0.93	-	-	-	-
B. INTERMEDIATE TRANSPORT	100.000%		38.302%	20.995%	18.147%	13.018%	8.164%	1.374%			
MILES 298.50			114.33	62.67	54.17	38.86	24.37	4.10	-	-	-
C. LOCAL DISTRIBUTION	100.000%		73.718%	7.759%	6.772%	5.334%	6.120%	0.297%			
MILES 808.06			595.69	62.70	54.72	43.10	49.45	2.40	-	-	-
RETAIL CUSTOMER METERING (1)	100.000%		75.719%	8.145%	6.468%	4.267%	5.198%	0.203%			
NUMBER OF METERS 80,150.00			60,689.00	6,528.00	5,184.00	3,420.00	4,166.00	163.00			
ENGINEERING SERVICES (2)	100.000%	46.850%	37.136%	4.756%	5.544%	2.811%	2.702%	0.201%			
ADMINISTRATIVE EXPENSE (3)	100.000%	46.850%	37.136%	4.756%	5.544%	2.811%	2.702%	0.201%			

NOTES:

(1) ALLOCATION BASED ON NUMBER OF METERS.

(2) ALLOCATION BASED ON DIRECT OPERATING EXPENSE.

(3) ALLOCATION BASED ON DIRECT OPERATING EXPENSE, ADJUSTED FOR ANY COST ASSIGNABLE EXCLUSIVELY TO GR OR RETAIL COMMUNITIES, IF APPLICABLE.

CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ADJUSTED OPERATING EXPENSE ALLOCATION BY COST CENTER - TASK #5, PART 1
FISCAL YEAR ENDED JUNE 30, 2013

ACTIVITY CODE	ACTIVITY	ADJUSTED EXPENSE BY ACTIVITY	FILTRATION PLANT	PUMPING STATIONS		WATERMAINS			RETAIL CUSTOMER METERING	ENGIN. SERVICES	ADMIN. EXPENSE
				PRIMARY	INTERM.	PRIMARY TRANSPORT	INTERMED. TRANSPORT	LOCAL DISTRIBUTION			
0430	TREASURER-CUSTOMER SERVICE	\$ 450,679							\$ 450,679		
4312	WATER-CUSTOMER SERVICE *	2,224,611							2,224,611		
4315	ENGINEERING	1,048,076								1,048,076	
4320	COLDBROOK CONTROL	1,331,932		1,331,932							
4322	COLDBROOK DISTRIBUTION	1,728,838		555,360	1,173,478						
4331	FIELD OPERATIONS	5,829,935				291,672	1,493,979	4,044,284			
4342	FILTRATION	6,687,356	6,687,356								
	SUBTOTAL OPERATING EXPENSE	19,301,427	6,687,356	1,887,292	1,173,478	291,672	1,493,979	4,044,284	2,675,290	1,048,076	-
4311	ADMINISTRATION	2,804,888									2,804,888
	TOTAL	\$ 22,106,315	\$ 6,687,356	\$ 1,887,292	\$ 1,173,478	\$ 291,672	\$ 1,493,979	\$ 4,044,284	\$ 2,675,290	\$ 1,048,076	\$ 2,804,888

* Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

METHOD OF DISTRIBUTION

0430	TREASURER-CUSTOMER SERVICE	100.000%							100.000%		
4312	WATER-CUSTOMER SERVICE	100.000%							100.000%		
4315	ENGINEERING	100.000%								100.000%	
4320	COLDBROOK CONTROL	100.000%		100.000%							
4322	COLDBROOK DISTRIBUTION	100.000%		32.120%	67.880%						
4331	FIELD OPERATIONS	100.000%				5.003%	25.626%	69.371%			
	TOTAL MILES OF MAIN 1,164.84					58.28	298.50	808.06			
4342	FILTRATION	100.000%	100.000%								
4311	ADMINISTRATION	100.000%									100.000%

CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ADJUSTED OPERATING EXPENSE ALLOCATION BY GOVERNMENTAL UNIT - TASK #5, PART 2
FISCAL YEAR ENDED JUNE 30, 2013

COST CENTER	ADJUSTED EXPENSE BY COST CENTER	INTEGRATED SYSTEM	RETAIL						WHOLESALE		
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	CITY OF EAST GR	COUNTY OF OTTAWA	ADA TOWNSHIP
FILTRATION PLANT	\$ 6,687,356	\$ 6,687,356									
PUMPING STATIONS:											
A. PRIMARY TRANSPORT	1,887,292	1,887,292									
B. INTERMEDIATE TRANSPORT	1,173,478		915,827	30,231	227,420	-	-	-			
WATERMAINS:											
A. PRIMARY TRANSPORT	291,672		239,673	16,115	22,820	8,409	4,655	-	-	-	-
B. INTERMEDIATE TRANSPORT	1,493,979		572,225	313,661	271,112	194,486	121,968	20,527	-	-	-
C. LOCAL DISTRIBUTION	4,044,284		2,981,365	313,796	273,879	215,722	247,510	12,012	-	-	-
RETAIL CUSTOMER METERING	2,675,290		2,025,702	217,902	173,038	114,155	139,062	5,431			
SUBTOTAL OPERATING EXPENSE	18,253,351	8,574,648	6,734,792	891,705	968,269	532,772	513,195	37,970	-	-	-
ENGINEERING SERVICES	1,048,076	492,334	386,698	51,199	55,600	30,593	29,472	2,180	-	-	-
ADMINISTRATIVE EXPENSE	2,804,888	1,317,597	1,034,891	137,019	148,799	81,875	78,873	5,834	-	-	-
TOTAL	\$ 22,106,315	\$ 10,384,579	\$ 8,156,381	\$ 1,079,923	\$ 1,172,668	\$ 645,240	\$ 621,540	\$ 45,984	\$ -	\$ -	\$ -

5-M

METHOD OF DISTRIBUTION

FILTRATION PLANTS	100.00%	100.00%									
PUMPING STATIONS											
A. PRIMARY TRANSPORT	100.00%	100.00%									
B. INTERMEDIATE TRANSPORT	100.00%		78.044%	2.576%	19.380%						
MEMO											
WATERMAINS											
TOTAL MILES:	1,164.84										
A. PRIMARY TRANSPORT		100.000%	82.172%	5.525%	7.824%	2.883%	1.596%				
MILES	58.28		47.89	3.22	4.56	1.68	0.93	-	-	-	-
B. INTERMEDIATE TRANSPORT		100.000%	38.302%	20.995%	18.147%	13.018%	8.164%	1.374%			
MILES	298.50		114.33	62.67	54.17	38.86	24.37	4.10	-	-	-
C. LOCAL DISTRIBUTION		100.000%	73.718%	7.759%	6.772%	5.334%	6.120%	0.297%			
MILES	808.06		595.69	62.70	54.72	43.10	49.45	2.40	-	-	-
RETAIL CUSTOMER METERING (1)		100.000%	75.719%	8.145%	6.468%	4.267%	5.198%	0.203%			
NUMBER OF METERS	80,150.00		60,689.00	6,528.00	5,184.00	3,420.00	4,166.00	163.00			
ENGINEERING SERVICES (2)		100.000%	36.896%	4.885%	5.305%	2.919%	2.812%	0.208%			
ADMINISTRATIVE EXPENSE (3)		100.000%	36.896%	4.885%	5.305%	2.919%	2.812%	0.208%			

NOTES:

(1) ALLOCATION BASED ON NUMBER OF METERS.

(2) ALLOCATION BASED ON DIRECT OPERATING EXPENSE.

(3) ALLOCATION BASED ON DIRECT OPERATING EXPENSE, ADJUSTED FOR ANY COST ASSIGNABLE EXCLUSIVELY TO GR OR RETAIL COMMUNITIES, IF APPLICABLE.

CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2013
RATE STUDY- TASKS NO. 4 & 5

ORGANIZATIONAL UNIT: 4301, 4311 & 4480 - ADMINISTRATION

EXPENDITURE SUB-OBJECT		OPERATING EXPENSES	ADJUSTED COST FACTORS	ADJUSTED CURRENT ANNUAL EXPENSES
NO.	DESCRIPTION			
7020	PERMANENT EMPLOYEES	\$ 553,533.56	\$ -	\$ 553,533.56
7040	TEMPORARY EMPLOYEES	38.00	-	38.00
7055	TIME & ONE-HALF	18.73	-	18.73
7105	EMPLOYERS SOCIAL SECURITY	38,496.59	-	38,496.59
7110	HOSPITALIZATION INSURANCE	76,952.57	3,424.39	80,376.96
7115	RETIREE HEALTH CARE	83,977.83	2,032.26	86,010.09
7120	RETIREMENT FUND CONTRIBUTION	80,603.29	-	80,603.29
7125	SPECIAL PENSION BENEFITS	8,683.34	-	8,683.34
7135	UNEMPLOYMENT COMPENSATION	755.60	-	755.60
7150	LONGEVITY PAY	2,898.00	-	2,898.00
7165	SHIFT DIFFERENTIAL	1.20	-	1.20
	TOTAL PERSONAL SERVICES	845,958.71	5,456.65	851,415.36
7260	SUPPLIES	3,769.20	-	3,769.20
	TOTAL SUPPLIES	3,769.20	-	3,769.20
8140	COMPUTER SERVICES	27,285.00	27,701.00	54,986.00
8160	ENGINEERING SERVICES	22,278.75	-	22,278.75
8180	CONTRACTUAL SERVICES	53,887.78	196,400.00	250,287.78
8355	GENERAL LIABILITY INSURANCE / CLAIMS	237,838.00	54,584.00	292,422.00
8450	INSURANCE PREMIUMS	159,768.74	-	159,768.74
8500	TELEPHONE	27,206.70	-	27,206.70
8800	COMMUNITY PROMOTION	442.20	-	442.20
8850	ADVERTISING - ANY MEDIA	(92.95)	-	(92.95)
9000	PRINTING & PUBLISHING	5,435.00	-	5,435.00
9300	MAINTENANCE SERVICE	1,024.83	-	1,024.83
9330	PAVEMENT REPAIR	343.98	-	343.98
9430	LAND RENTAL OR LEASE	3,854.70	-	3,854.70
9440	VEHICLE RENTAL/CAR MILEAGE	2,801.62	-	2,801.62
9550	PROFESSIONAL DEVELOPMENT	12,501.68	-	12,501.68
9552	OTHER TRAVEL AND TRAINING	14,049.16	-	14,049.16
9556	MEMBERSHIPS	46,146.24	-	46,146.24
9558	PUBLICATIONS AND SUBSCRIPTIONS	887.15	-	887.15
9610	FEES	240.00	-	240.00
9616	ADMINISTRATIVE SERVICES (ICB)	143,655.00	(143,655.00)	-
9620	BAD DEBT WRITE-OFFS	7,164.50	-	7,164.50
	TOTAL OTHER SERVICES & CHARGES	766,718.08	135,030.00	901,748.08
9735	BLD. ADDITIONS/IMPROVEMENTS	82.58	-	82.58
9760	EQUIPMENT	25,606.31	-	25,606.31
	TOTAL CAPITAL	25,688.89	-	25,688.89
9993	OPERATING TRANS-PROJECTS	22,000.00	-	22,000.00
9992	OPERATING TRANSFERS-A87 COST	1,041,286.00	(41,020.00)	1,000,266.00
	TOTAL TRANSFERS/FEES	1,063,286.00	(41,020.00)	1,022,266.00
	ORGANIZATIONAL UNIT TOTAL	\$ 2,705,420.88	\$ 99,466.65	\$ 2,804,887.53

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2013
RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 4312- CUSTOMER SERVICES

EXPENDITURE SUB-OBJECT		OPERATING EXPENSES	ADJUSTED COST FACTORS	ADJUSTED CURRENT ANNUAL EXPENSES
NO.	DESCRIPTION			
7020	PERMANENT EMPLOYEES	\$ 1,629,260.17	\$ -	\$ 1,629,260.17
7025	ACT ASSIGNMENT	11,607.68	-	11,607.68
7040	TEMPORARY EMPLOYEES	13,438.48	-	13,438.48
7055	TIME & ONE-HALF	69,091.92	-	69,091.92
7105	EMPLOYERS SOCIAL SECURITY	129,625.98	-	129,625.98
7110	HOSPITALIZATION INSURANCE	408,875.18	18,194.95	427,070.13
7115	RETIREE HEALTH CARE	256,095.36	6,197.51	262,292.87
7120	RETIREMENT FUND CONTRIBUTION	309,876.21	-	309,876.21
7135	UNEMPLOYMENT COMPENSATION	2,865.00	-	2,865.00
7150	LONGEVITY PAY	21,720.47	-	21,720.47
7165	SHIFT DIFFERENTIAL	903.48	-	903.48
	TOTAL PERSONAL SERVICES	<u>2,853,359.93</u>	<u>24,392.46</u>	<u>2,877,752.39</u>
7260	SUPPLIES	228,923.08	-	228,923.08
7300	POSTAGE	21,116.37	-	21,116.37
	TOTAL SUPPLIES	<u>250,039.45</u>	<u>-</u>	<u>250,039.45</u>
8140	COMPUTER SERVICES	174,428.04	10,192.96	184,621.00
8140	COMPUTER SERVICES (CIS-DEPR & ROI)		284,011.00	284,011.00
8180	CONTRACTUAL SERVICES	640,320.50	-	640,320.50
8500	TELEPHONE	3,067.62	-	3,067.62
9000	PRINTING & PUBLISHING	3,068.34	-	3,068.34
9300	MAINTENANCE SERVICE	397,321.29	-	397,321.29
9420	EQUIPMENT RENTALS OR LEASE	130,031.81	-	130,031.81
9440	VEHICLE RENTAL/CAR MILEAGE	11,701.16	-	11,701.16
9552	OTHER TRAVEL AND TRAINING	1,293.40	-	1,293.40
9554	LOCAL BUSINESS EXPENSE	468.80	-	468.80
	TOTAL OTHER SERVICES & CHARGES	<u>1,361,700.96</u>	<u>294,203.96</u>	<u>1,655,904.92</u>
9990	OPERATING TRANS OUT-SUBSIDIES	292,161.00	(292,161.00)	-
	TOTAL TRANSFERS/FEES	<u>292,161.00</u>	<u>(292,161.00)</u>	<u>-</u>
	ORGANIZATIONAL UNIT TOTAL (GROSS)	\$ 4,757,261.34	\$ 26,435.42	\$ 4,783,696.76
	LESS: SDSF CONTRIBUTION *	<u>(2,679,512.00)</u>	<u>120,425.92</u>	<u>(2,559,086.08)</u>
	ORGANIZATIONAL UNIT TOTAL (NET)	<u>\$ 2,077,749.34</u>	<u>\$ 146,861.34</u>	<u>\$ 2,224,610.68</u>

* Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2013
RATE STUDY- TASKS NO. 4 & 5

ORGANIZATIONAL UNIT: 4315- ENGINEERING

EXPENDITURE SUB-OBJECT		OPERATING EXPENSES	ADJUSTED COST FACTORS	ADJUSTED CURRENT ANNUAL EXPENSES
NO.	DESCRIPTION			
7020	PERMANENT EMPLOYEES	\$ 485,191.39	\$ -	\$ 485,191.39
7055	TIME & ONE-HALF	1,118.37	-	1,118.37
7105	EMPLOYERS SOCIAL SECURITY	34,890.28	-	34,890.28
7110	HOSPITALIZATION INSURANCE	104,404.66	4,646.01	109,050.67
7115	RETIREE HEALTH CARE	75,246.57	1,820.97	77,067.54
7120	RETIREMENT FUND CONTRIBUTION	79,669.47	-	79,669.47
7125	SPECIAL PENSION BENEFITS	4,798.35	-	4,798.35
7135	UNEMPLOYMENT COMPENSATION	673.62	-	673.62
7150	LONGEVITY PAY	4,307.00	-	4,307.00
	TOTAL PERSONAL SERVICES	790,299.71	6,466.98	796,766.69
7260	SUPPLIES	3,128.86	-	3,128.86
7300	POSTAGE	174.00	-	174.00
	TOTAL SUPPLIES	3,302.86	-	3,302.86
8140	COMPUTER SERVICES	44,337.96	23,290.04	67,628.00
8180	CONTRACTUAL SERVICES	95,155.62	-	95,155.62
9000	PRINTING & PUBLISHING	461.00	-	461.00
9300	MAINTENANCE SERVICE	4,624.02	-	4,624.02
9420	EQUIPMENT RENTALS OR LEASE	37,283.84	-	37,283.84
9440	VEHICLE RENTAL/CAR MILEAGE	1,173.00	-	1,173.00
	TOTAL OTHER SERVICES & CHARGES	183,035.44	23,290.04	206,325.48
9760	EQUIPMENT	18,026.43	-	18,026.43
	TOTAL CAPITAL	18,026.43	-	18,026.43
9994	OPERATING TRANS-DEV CENTER	23,655.00	-	23,655.00
	TOTAL TRANSFERS/FEES	23,655.00	-	23,655.00
	ORGANIZATIONAL UNIT TOTAL	\$ 1,018,319.44	\$ 29,757.02	\$ 1,048,076.46

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2013
RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 4320- COLDBROOK CONTROL

EXPENDITURE SUB-OBJECT		OPERATING EXPENSES	ADJUSTED COST FACTORS	ADJUSTED CURRENT ANNUAL EXPENSES
NO.	DESCRIPTION			
7020	PERMANENT EMPLOYEES	\$ 711,551.41	\$ -	\$ 711,551.41
7025	ACT.ASSIGNMENT	4.08	-	4.08
7050	REGULAR HOURLY RATE	3,687.06	-	3,687.06
7055	TIME & ONE-HALF	33,000.35	-	33,000.35
7105	EMPLOYERS SOCIAL SECURITY	55,968.20	-	55,968.20
7110	HOSPITALIZATION INSURANCE	153,515.00	6,831.42	160,346.42
7115	RETIREE HEALTH CARE	111,401.96	2,695.93	114,097.89
7120	RETIREMENT FUND CONTRIBUTION	130,893.75	-	130,893.75
7135	UNEMPLOYMENT COMPENSATION	1,015.93	-	1,015.93
7150	LONGEVITY PAY	10,307.13	-	10,307.13
7165	SHIFT DIFFERENTIAL	7,276.87	-	7,276.87
	TOTAL PERSONAL SERVICES	<u>1,218,621.74</u>	<u>9,527.35</u>	<u>1,228,149.09</u>
7260	SUPPLIES	5,676.04	-	5,676.04
7680	CLOTHING/CLEANING ALLOWANCE	409.80	-	409.80
	TOTAL SUPPLIES	<u>6,085.84</u>	<u>-</u>	<u>6,085.84</u>
8140	COMPUTER SERVICES	35,079.96	29,136.04	64,216.00
8500	TELEPHONE	24,766.34	-	24,766.34
9420	EQUIPMENT RENTALS OR LEASE	8,128.67	-	8,128.67
9440	VEHICLE RENTAL/CAR MILEAGE	586.50	-	586.50
	TOTAL OTHER SERVICES & CHARGES	<u>68,561.47</u>	<u>29,136.04</u>	<u>97,697.51</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 1,293,269.05</u>	<u>\$ 38,663.39</u>	<u>\$ 1,331,932.44</u>

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2013
RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 4322- COLDBROOK DISTRIBUTION

EXPENDITURE SUB-OBJECT		OPERATING EXPENSES	ADJUSTED COST FACTORS	ADJUSTED CURRENT ANNUAL EXPENSES
NO.	DESCRIPTION			
7020	PERMANENT EMPLOYEES	\$ 427,058.05	\$ -	\$ 427,058.05
7055	TIME & ONE-HALF	1,421.44	-	1,421.44
7105	EMPLOYERS SOCIAL SECURITY	30,501.28	-	30,501.28
7110	HOSPITALIZATION INSURANCE	97,551.12	4,341.02	101,892.14
7115	RETIREE HEALTH CARE	67,636.75	1,636.81	69,273.56
7120	RETIREMENT FUND CONTRIBUTION	79,651.03	-	79,651.03
7135	UNEMPLOYMENT COMPENSATION	593.68	-	593.68
7150	LONGEVITY PAY	5,365.00	-	5,365.00
	TOTAL PERSONAL SERVICES	709,778.35	5,977.83	715,756.18
7260	SUPPLIES	16,858.24	-	16,858.24
7300	POSTAGE	114.95	-	114.95
	TOTAL SUPPLIES	16,973.19	-	16,973.19
8140	COMPUTER SERVICES	14,130.00	(14,130.00)	-
8180	CONTRACTUAL SERVICES	26,824.00	-	26,824.00
8500	TELEPHONE	594.81	-	594.81
9210	ELECTRICITY	1,375,021.28	(19,655.78)	1,355,365.50
9220	WATER	4,137.29	-	4,137.29
9230	NATURAL GAS	72,022.81	-	72,022.81
9300	MAINTENANCE SERVICE	19,360.82	-	19,360.82
9330	PAVEMENT REPAIR	236.22	-	236.22
9420	EQUIPMENT RENTALS OR LEASE	64,847.27	-	64,847.27
9610	FEES	365.00	-	365.00
9622	REFUSE COLLECTION CHARGES	3,107.15	-	3,107.15
xxxx	FACILITY RENTALS		(550,780.73)	(550,780.73)
	TOTAL OTHER SERVICES & CHARGES	1,580,646.65	(584,566.51)	996,080.14
9760	EQUIPMENT	27.99	-	27.99
	TOTAL CAPITAL	27.99	-	27.99
	ORGANIZATIONAL UNIT TOTAL	\$ 2,307,426.18	\$ (578,588.68)	\$ 1,728,837.50

CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2013
RATE STUDY- TASKS NO. 4 & 5

ORGANIZATIONAL UNIT: 4331- FIELD OPERATIONS

EXPENDITURE SUB-OBJECT		OPERATING EXPENSES	ADJUSTED COST FACTORS	ADJUSTED CURRENT ANNUAL EXPENSES
NO.	DESCRIPTION			
7020	PERMANENT EMPLOYEES	\$ 1,408,660.14	\$ -	\$ 1,408,660.14
7025	ACT.ASSIGNMENT	1,772.37	-	1,772.37
7055	TIME & ONE-HALF	165,671.73	-	165,671.73
7105	EMPLOYERS SOCIAL SECURITY	115,098.44	-	115,098.44
7110	HOSPITALIZATION INSURANCE	335,107.46	14,912.28	350,019.74
7115	RETIREE HEALTH CARE	219,188.55	5,304.36	224,492.91
7120	RETIREMENT FUND CONTRIBUTION	258,575.30	-	258,575.30
7125	SPECIAL PENSION BENEFITS	59.42	-	59.42
7135	UNEMPLOYMENT COMPENSATION	1,981.59	-	1,981.59
7150	LONGEVITY PAY	15,931.70	-	15,931.70
7165	SHIFT DIFFERENTIAL	2,742.70	-	2,742.70
	TOTAL PERSONAL SERVICES	2,524,789.40	20,216.64	2,545,006.04
7260	SUPPLIES	66,385.28	-	66,385.28
7300	POSTAGE	149.69	-	149.69
7680	CLOTHING/CLEANING ALLOWANCE	885.24	-	885.24
	TOTAL SUPPLIES	67,420.21	-	67,420.21
8140	COMPUTER SERVICES	78,444.00	61,226.00	139,670.00
8180	CONTRACTUAL SERVICES	192,213.32	-	192,213.32
9210	ELECTRICITY	56,073.38	-	56,073.38
9220	WATER	436.44	-	436.44
9230	NATURAL GAS	28,293.15	-	28,293.15
9300	MAINTENANCE SERVICE	263,920.35	-	263,920.35
9330	PAVEMENT REPAIR	1,701,600.00	-	1,701,600.00
9420	EQUIPMENT RENTALS OR LEASE	820,031.74	-	820,031.74
9440	VEHICLE RENTAL/CAR MILEAGE	1,904.50	-	1,904.50
9552	OTHER TRAVEL AND TRAINING	1,941.97	-	1,941.97
9554	LOCAL BUSINESS EXPENSE	95.45	-	95.45
	TOTAL OTHER SERVICES & CHARGES	3,144,954.30	61,226.00	3,206,180.30
9760	EQUIPMENT	11,328.75	-	11,328.75
	TOTAL CAPITAL	11,328.75	-	11,328.75
	ORGANIZATIONAL UNIT TOTAL	\$ 5,748,492.66	\$ 81,442.64	\$ 5,829,935.30

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2013
RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 4342- LAKE MI. FILTRATION

EXPENDITURE SUB-OBJECT		OPERATING EXPENSES	ADJUSTED COST FACTORS	ADJUSTED CURRENT ANNUAL EXPENSES
NO.	DESCRIPTION			
7020	PERMANENT EMPLOYEES	\$ 1,693,972.85	\$ -	\$ 1,693,972.85
7025	ACT.ASSIGNMENT	2,228.36	-	2,228.36
7050	REGULAR HOURLY RATE	1,753.12	-	1,753.12
7055	TIME & ONE-HALF	36,577.95	-	36,577.95
7105	EMPLOYERS SOCIAL SECURITY	128,392.29	-	128,392.29
7110	HOSPITALIZATION INSURANCE	385,101.03	17,137.00	402,238.03
7115	RETIREE HEALTH CARE	267,988.07	6,485.31	274,473.38
7120	RETIREMENT FUND CONTRIBUTION	315,581.16	-	315,581.16
7135	UNEMPLOYMENT COMPENSATION	2,399.30	-	2,399.30
7150	LONGEVITY PAY	15,300.88	-	15,300.88
7165	SHIFT DIFFERENTIAL	7,596.82	-	7,596.82
	TOTAL PERSONAL SERVICES	<u>2,856,891.83</u>	<u>23,622.31</u>	<u>2,880,514.14</u>
7260	SUPPLIES	910,414.85	-	910,414.85
7300	POSTAGE	152.58	-	152.58
7680	CLOTHING/CLEANING ALLOWANCE	231.00	-	231.00
	TOTAL SUPPLIES	<u>910,798.43</u>	<u>-</u>	<u>910,798.43</u>
8140	COMPUTER SERVICES	108,165.00	60,402.00	168,567.00
8180	CONTRACTUAL SERVICES	209,323.35	-	209,323.35
8500	TELEPHONE	9,693.26	-	9,693.26
9210	ELECTRICITY	2,032,795.29	(42,231.53)	1,990,563.76
9230	NATURAL GAS	224,947.88	-	224,947.88
9300	MAINTENANCE SERVICE	184,287.96	-	184,287.96
9420	EQUIPMENT RENTALS OR LEASE	99,717.39	-	99,717.39
9440	VEHICLE RENTAL/CAR MILEAGE	1,173.00	-	1,173.00
9622	REFUSE COLLECTION CHARGES	517.98	-	517.98
	TOTAL OTHER SERVICES & CHARGES	<u>2,870,621.11</u>	<u>18,170.47</u>	<u>2,888,791.58</u>
9765	SOFTWARE	7,252.20	-	7,252.20
	TOTAL CAPITAL	<u>7,252.20</u>	<u>-</u>	<u>7,252.20</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 6,645,563.57</u>	<u>\$ 41,792.78</u>	<u>\$ 6,687,356.35</u>

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2013
RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 0430- TREASURER- CUSTOMER SERV'S

EXPENDITURE SUB-OBJECT		OPERATING	ADJUSTED	ADJUSTED
NO.	DESCRIPTION	EXPENSES	COST FACTORS	CURRENT ANNUAL EXPENSES
7020	PERMANENT EMPLOYEES	\$ 173,470.69	\$ -	\$ 173,470.69
7105	EMPLOYERS SOCIAL SECURITY	11,483.33	-	11,483.33
7110	HOSPITALIZATION INSURANCE	38,485.49	1,712.60	40,198.09
7115	RETIREE HEALTH CARE	25,804.48	624.47	26,428.95
7120	RETIREMENT FUND CONTRIBUTION	29,012.31	-	29,012.31
7125	SPECIAL PENSION BENEFITS	426.76	-	426.76
7135	UNEMPLOYMENT COMPENSATION	227.52	-	227.52
7150	LONGEVITY PAY	974.78	-	974.78
	TOTAL PERSONAL SERVICES	279,885.36	2,337.07	282,222.43
7260	SUPPLIES	4,218.46	-	4,218.46
	TOTAL SUPPLIES	4,218.46	-	4,218.46
8140	COMPUTER SERVICES	29,403.96	(6,770.96)	22,633.00
8180	CONTRACTUAL SERVICES	12,411.26	-	12,411.26
8355	GENERAL LIABILITY INSURANCE / CLAIMS	4,380.00	-	4,380.00
9410	BUILDINGS RENTALS OR LEASE	6,784.53	-	6,784.53
9440	VEHICLE RENTAL/CAR MILEAGE	5,232.91	-	5,232.91
9610	FEES	112,795.94	-	112,795.94
	TOTAL OTHER SERVICES & CHARGES	171,008.60	(6,770.96)	164,237.64
	ORGANIZATIONAL UNIT TOTAL	\$ 455,112.42	\$ (4,433.89)	\$ 450,678.53

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2013
RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL SUMMARY

NO.	EXPENDITURE SUB-OBJECT DESCRIPTION	OPERATING EXPENSES	ADJUSTED COST FACTORS	ADJUSTED CURRENT ANNUAL CURRENT
7020	PERMANENT EMPLOYEES	\$ 7,082,698.26	\$ -	\$ 7,082,698.26
7025	ACT ASSIGNMENT	15,612.49	-	15,612.49
7040	TEMPORARY EMPLOYEES	13,476.48	-	13,476.48
7050	REGULAR HOURLY RATE	5,440.18	-	5,440.18
7055	TIME & ONE-HALF	306,900.49	-	306,900.49
7105	EMPLOYERS SOCIAL SECURITY	544,456.39	-	544,456.39
7110	HOSPITALIZATION INSURANCE	1,599,992.51	71,199.67	1,671,192.18
7115	RETIREE HEALTH CARE	1,107,339.57	26,797.62	1,134,137.19
7120	RETIREMENT FUND CONTRIBUTION	1,283,862.52	-	1,283,862.52
7125	SPECIAL PENSION BENEFITS	13,967.87	-	13,967.87
7135	UNEMPLOYMENT COMPENSATION	10,512.24	-	10,512.24
7150	LONGEVITY PAY	76,804.96	-	76,804.96
7165	SHIFT DIFFERENTIAL	18,521.07	-	18,521.07
	TOTAL PERSONAL SERVICES	12,079,585.03	97,997.29	12,177,582.32
7260	SUPPLIES	1,239,374.01	-	1,239,374.01
7300	POSTAGE	21,707.59	-	21,707.59
7680	CLOTHING/CLEANING ALLOWANCE	1,526.04	-	1,526.04
	TOTAL SUPPLIES	1,262,607.64	-	1,262,607.64
8140	COMPUTER SERVICES	511,273.92	191,047.08	702,321.00
8140	COMPUTER SERVICES (CIS-DEPR & ROI)	-	284,011.00	284,011.00
8160	ENGINEERING SERVICES	22,278.75	-	22,278.75
8180	CONTRACTUAL SERVICES	1,230,135.83	196,400.00	1,426,535.83
8355	GENERAL LIABILITY INSURANCE / CLAIMS	242,218.00	54,584.00	296,802.00
8450	INSURANCE PREMIUMS	159,768.74	-	159,768.74
8500	TELEPHONE	65,328.73	-	65,328.73
8800	COMMUNITY PROMOTION	442.20	-	442.20
8850	ADVERTISING - ANY MEDIA	(92.95)	-	(92.95)
9000	PRINTING & PUBLISHING	8,964.34	-	8,964.34
9210	ELECTRICITY	3,463,889.95	(61,887.31)	3,402,002.64
9220	WATER	4,573.73	-	4,573.73
9230	NATURAL GAS	325,263.84	-	325,263.84
9300	MAINTENANCE SERVICE	870,539.27	-	870,539.27
9330	PAVEMENT REPAIR	1,702,180.20	-	1,702,180.20
9410	BUILDINGS RENTALS OR LEASE	6,784.53	-	6,784.53
9420	EQUIPMENT RENTALS OR LEASE	1,160,040.72	-	1,160,040.72
9430	LAND RENTAL OR LEASE	3,854.70	-	3,854.70
9440	VEHICLE RENTAL/CAR MILEAGE	24,572.69	-	24,572.69
9550	PROFESSIONAL DEVELOPMENT	12,501.68	-	12,501.68
9552	OTHER TRAVEL AND TRAINING	17,284.53	-	17,284.53
9554	LOCAL BUSINESS EXPENSE	564.25	-	564.25
9556	MEMBERSHIPS	46,146.24	-	46,146.24
9558	PUBLICATIONS AND SUBSCRIPTIONS	887.15	-	887.15
9610	FEES	113,400.94	-	113,400.94
9616	ADMINISTRATIVE SERVICES	143,655.00	(143,655.00)	-
9620	BAD DEBT WRITE-OFFS	7,164.50	-	7,164.50
9622	REFUSE COLLECTION CHARGES	3,625.13	-	3,625.13
xxxx	FACILITY RENTALS	-	(550,780.73)	(550,780.73)
	TOTAL OTHER SERVICES & CHARGES	10,147,246.61	(30,280.96)	10,116,965.65
9735	BLD. ADDITIONS/IMPROVEMENTS	82.58	-	82.58
9760	EQUIPMENT	54,989.48	-	54,989.48
9765	SOFTWARE	7,252.20	-	7,252.20
	TOTAL CAPITAL	62,324.26	-	62,324.26
9993	OPERATING TRANS-PROJECTS	22,000.00	-	22,000.00
9990	OPERATING TRANS OUT-SUBSIDIES	292,161.00	(292,161.00)	-
9994	OPERATING TRANS-DEV CENTER	23,655.00	-	23,655.00
9992	OPERATING TRANSFERS-A87 COST	1,041,286.00	(41,020.00)	1,000,266.00
	TOTAL TRANSFERS/FEES	1,379,102.00	(333,181.00)	1,045,921.00
	GRAND TOTAL- EXPENDITURES	\$ 24,930,865.54	\$ (265,464.67)	\$ 24,665,400.87
	LESS: SDSF CONTRIBUTION	(2,679,512.00)	120,425.92	(2,559,086.08)
	NET TOTAL- EXPENDITURES	\$ 22,251,353.54	\$ (145,038.75)	\$ 22,106,314.79

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MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 14, 2013

TO: Eric R. DeLong
Deputy City Manager

FROM: Geri D. Eye, CPA 
Utility Financial Officer

**SUBJECT: 2013 WATER RATE STUDY TASK #4
FY13 OPERATING EXPENSES - WATER PUMPING FACILITIES**

The attached schedule allocates the integrated and non-integrated adjusted expenses for operating and maintaining Coldbrook Distribution (4322) in FY13 to the system pumping stations based on energy costs. The operating expenses consist of direct labor, utilities, operating and maintenance supplies, repairs and maintenance, and equipment rental.

Attachment

GDE:ss

ALLOCATION OF COLDBROOK PUMPING TO WATER PUMPING FACILITIES


<i>STATION</i>	<i>ENERGY COST</i>	<i>PERCENT</i>	<i>EXPENDITURE ALLOCATION</i>	
			<i>ACTUAL</i>	<i>ADJUSTED</i>
<i>ALGER</i>	\$ 56,459	4.11%	\$ 94,744	\$ 70,987
<i>BOOSTER A</i>	8,082	0.59%	13,562	10,162
<i>BOOSTER D</i>	20,895	1.52%	35,064	26,272
<i>BRISTOL</i>	24,044	1.75%	40,348	30,231
<i>COLDBROOK</i>	321,554	23.39%	539,601	404,294
<i>COVELL</i>	36,441	2.65%	61,152	45,818
<i>EAST PARIS</i>	180,877	13.15%	303,530	227,420
<i>FRANKLIN</i>	383,300	27.88%	643,217	481,930
<i>LEFFINGWELL</i>	2,078	0.15%	3,487	2,613
<i>LIVINGSTON</i>	192,531	14.00%	323,087	242,073
<i>WILSON</i>	91,076	6.62%	152,835	114,511
<i>BURTON</i>	29,073	2.11%	48,787	36,554
<i>DEAN LAKE</i>	28,611	2.08%	48,012	35,973
<i>TOTAL</i>	<u>\$ 1,375,021</u>	<u>100.00%</u>	<u>\$ 2,307,426</u>	<u>\$ 1,728,838</u>

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 29, 2013

TO: Geri Eye
Utility Financial Officer

FROM: Scott Buhner 
Chief Financial Officer

**SUBJECT: 2013 WATER RATE STUDY TASK #5
KNOWN COST ADJUSTMENTS**

Known cost adjustments by which to adjust FY13 operating costs are listed below.

Object Level 3 – 7060, 7020, 7040, 7055, 7025, 7045, 7050, 7030, 7035, 7190

The wage increase factor to translate FY2013 actual costs to estimated calendar 2014 will be 0.0%. Collective bargaining has not concluded and therefore, at this time there is not a known cost increase for wages.

Object Level 3 – 8140/8355/9990

Adjust FY2013 actual cost to reflect adjustments in charges for central services rendered by the Information Technology Fund, the Insurance Payment Fund and the General Operating Fund.

Object Level 3 - 7105

Increase FY2013 actual FICA expense by 0.0% consistent with the known wage impacts.

Object Level 3 - 7110

The Trend Report is not completed at this time; however, we anticipate favorable results on rates. Although health care costs have been trending higher, the anticipation of favorable cost trends and three-year smoothing has limited the projected increase in health insurance to 4.45%. Increase FY2013 health insurance actual by 4.45% to reflect these anticipated rate changes.

Object Level 3 - 7115

The factor to establish calendar year 2014's retiree health care cost is 2.42%. Increase the total of fiscal year 2013's retiree health care by this percent to establish the cost for calendar year 2014.

Object Level 3 - 7120

The pension expense factor to translate FY2013 actual costs to estimated calendar 2014 will be 0.0%. Had the pension system achieved rates of return consistent with actuarial assumptions, a 16.56% increase in general pension rates would have been projected. However, the pension system achieved superior rates of return that were far in excess of the actuarial assumptions. Therefore, no cost increase in pension expense is being projected for calendar year 2014.

Object Level 3 - 9990

Decrease FY2013 actual Operating Transfers Out-Subsidies expense by \$292,161 to account for the one-time nature of the 311 Call Center Fund contributions for development.

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 12, 2013

TO: Geri D. Eye, CPA
Utility Financial Officer

FROM: Joellen C. Thompson, PE
Water System Manager



**SUBJECT: 2013 WATER RATE STUDY TASK #5
KNOWN COST ADJUSTMENTS**

Known cost adjustments by which to adjust FY13 operating costs are listed below:

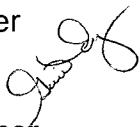
<u>ACCOUNT</u> <u>User Code</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>
4311-8180	Utilities Competitive Assessment Project - Phases 1-3	\$196,400.00
4312-8140	Cayenta Customer Information System	\$284,011.00
4322-xxxx	Elevated Storage Tank Facility Rentals	(\$550,780.73)
4322-9210	Consumers Energy Efficiency Program	(\$19,655.78)
4342-9210	Consumers Energy Efficiency Program	(\$42,231.53)

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 14, 2013

TO: Eric R. DeLong
Deputy City Manager

FROM: Geri D. Eye, CPA 
Utility Financial Officer

SUBJECT: 2013 WATER RATE STUDY TASK #6

The Water Supply System Fund's revenue and volumes by governmental unit for the year ending June 30, 2013, are disclosed on the attached page. In addition, actual volume comparisons for the past five (5) years by governmental unit are included herein.

Attachments

GDE:ss

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
TASK NO. 6**

DETERMINE WATER VOLUME AND REVENUE BY GOVERNMENTAL ENTITY FOR THE YEAR ENDED JUNE 30, 2013:

RETAIL:	SALES REVENUE		3 YR AVE VOL BILLED (GALLONS)
	A	B	
CITY OF GRAND RAPIDS (1)	\$ 24,197,181.13		6,472,647,456
CITY OF WALKER	3,210,338.89		893,185,304
CITY OF KENTWOOD	4,436,881.63		1,305,755,924
CASCADE TOWNSHIP	3,127,219.00	39,000.00	629,273,700
GRAND RAPIDS TOWNSHIP	2,334,744.87		516,336,172
TALLMADGE TOWNSHIP	119,782.38	16,704.00	18,493,552
SUB-TOTAL RETAIL (2)	<u>\$ 37,426,147.90</u>	<u>\$ 55,704.00</u>	<u>9,835,692,108</u>
WHOLESALE:			
CITY OF E. GRAND RAPIDS	\$ 963,715.95		455,223,824
OTTAWA CO. (3)	1,451,846.14	5,760.00	828,240,952
ADA TOWNSHIP	1,317,290.41		487,843,356
SUB-TOTAL WHOLESALE	<u>\$ 3,732,852.50</u>	<u>\$ 5,760.00</u>	<u>1,771,308,132</u>
TOTAL	<u>\$ 41,159,000.40</u>	<u>\$ 61,464.00</u>	<u>11,607,000,240</u>

REVENUE CLASSIFICATION:

A) 4311 - 642011 RETAIL METERED WATER SALES	37,412,223.94
4311 - 642012 WHOLESALE WATER SALES	3,732,852.50
4311 - 642013 WYOMING WATER SALES	13,923.96
SUB-TOTAL	<u>\$ 41,159,000.40</u>
B) 4311 - 607048 FIRE HYDRANT BILLINGS	61,464.00
TOTAL	<u>\$ 41,220,464.40</u>

- (1) THE VOLUME & DOLLAR AMOUNT FOR THE CITY OF WYOMING ARE INCLUDED IN THE GRAND RAPIDS TOTALS.
- (2) A REVENUE ACCRUAL OF (\$1,553,578) HAS BEEN PRORATED TO ALL RETAIL CUSTOMER COMMUNITIES TO ACCRUE BILLINGS FROM THE LAST READING DATE THROUGH JUNE 30, 2013.
- (3) OTTAWA COUNTY RATES ARE CALCULATED BASED ON MOST RECENT FISCAL YEAR BILLED VOLUME PER CONTRACT.

**CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
2013 RATE STUDY TASK NO. 6**

VOLUME COMPARISONS FOR FIVE (5) YEARS BY GOVERNMENTAL UNIT *
VOLUME = 1,000 GALLONS

MUNICIPALITY	FY09 VOL BILLED	FY10 VOL BILLED % CHANGE	FY11 VOL BILLED % CHANGE	FY12 VOL BILLED % CHANGE	FY13 VOL BILLED % CHANGE	FY09 - FY13 % CHANGE
GRAND RAPIDS	6,729,621	6,488,180 -3.59%	6,225,309 -4.05%	6,354,409 2.07%	6,838,225 7.61%	1.61%
WALKER	953,606	875,586 -8.18%	850,755 -2.84%	866,427 1.84%	962,373 11.07%	0.92%
KENTWOOD	1,198,808	1,164,972 -2.82%	1,214,620 4.26%	1,284,088 5.72%	1,418,559 10.47%	18.33%
CASCADE TWP	655,587	576,850 -12.01%	581,868 0.87%	599,311 3.00%	706,642 17.91%	7.79%
GRAND RAPIDS TWP	527,389	479,671 -9.05%	455,087 -5.13%	493,252 8.39%	600,669 21.78%	13.89%
TALLMADGE TWP	20,407	17,420 -14.64%	17,173 -1.42%	18,149 5.68%	20,159 11.07%	-1.22%
EAST GRAND RAPIDS	438,786	418,797 -4.56%	449,849 7.41%	454,722 1.08%	461,100 1.40%	5.09%
OTTAWA COUNTY	680,543	706,518 3.82%	666,164 -5.71%	763,172 14.56%	828,241 8.53%	21.70%
ADA TWP	523,082	479,072 -8.41%	480,928 0.39%	495,797 3.09%	486,804 -1.81%	-6.94%
TOTAL	11,727,829	11,207,066 -4.44%	10,941,753 -2.37%	11,329,327 3.54%	12,322,772 8.77%	5.07%

VOLUME PUMPED	13,172,000	12,480,000	12,488,000	13,176,000	13,438,000
% BILLED TO PUMPED	89.0%	89.8%	87.6%	86.0%	91.7%

GRAND RAPIDS VOLUME COMPARED TO
CUSTOMER COMMUNITIES

VOLUME = 1,000 GALLONS	FY09 % OF TOTAL	FY10 VOL BILLED % OF TOTAL	FY11 VOL BILLED % OF TOTAL	FY12 VOL BILLED % OF TOTAL	FY13 VOL BILLED % OF TOTAL
GRAND RAPIDS	57.38%	6,488,180 57.89%	6,225,309 56.89%	6,354,409 56.09%	6,838,225 55.49%
CUSTOMER COMMUNITIES	42.62%	4,718,886 42.11%	4,716,444 43.11%	4,974,918 43.91%	5,484,547 44.51%
TOTAL	100.00%	11,207,066 100.00%	10,941,753 100.00%	11,329,327 100.00%	12,322,772 100.00%

* Volumes were restated from previous Rate Studies to reflect actual billings without adjustment for accrued revenues.

**CITY OF GRAND RAPIDS, MICHIGAN
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
TASK NO. 7**

OPERATING REVENUES OTHER THAN FROM SALES OF WATER:

4311-451006	CONTRACTOR UNDERGROUND LICENSE	\$ 6,840.00
4311-476012	TAPPING PERMITS	7,200.00
4311-607001	MISCELLANEOUS SERVICE FEES	493,113.47
4311-607007	MATERIAL - SERVICES	3,139.47
4311-607033	SERVICES FOR CONTRACTORS	89,333.71
4311-607051	INSPECTION FEES - UTILITIES	28,510.00
4311-607052	METER SETTING FEES	37,610.00
4311-642009	SALE OF SCRAP MATERIAL	25,606.07
4311-642024	UNMETERED WATER	91,622.49
4311-672002	PENALTIES ON SPECIAL ASSESSMENTS	15,126.59
		<u>\$ 798,101.80</u>

CREDIT: UNDERUTILIZATION OF PENALTY CREDIT FROM PREVIOUS YEAR	<u>\$ 321,999.00</u>
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OTHER OPERATING REVENUES NOT INCLUDED:

CAPITAL CONTRIBUTION & LAKELINE CREDIT

4311-607051	WATER FRONT FOOTAGE	\$ 147,276.00
4311-607053	INTEGRATED WATER CONNECTION	803,059.48
		<u>\$ 950,335.48</u>

OFFSETTING CREDIT TO CUSTOMER ACCOUNTING ACTIVITY EXPENSES:

4311-699001	BILLABLE EXPENSE - SEWAGE DISPOSAL SYSTEM **	<u>\$ 2,679,512.00</u>
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** Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.*

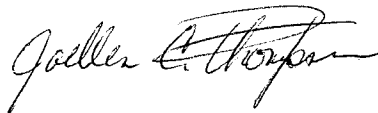
MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 31, 2013

TO: Geri D. Eye, CPA
Utility Financial Officer

FROM: Joellen C. Thompson, P.E.
Water System Manager



SUBJECT: 2013 WATER RATE STUDY - TASK #8

Although we continue to reduce expenditures, no significant changes in operating levels are anticipated to take effect by January 1, 2014, which would require adjustments to operating costs for the test period.

JCT

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 31, 2013

TO: Geri D. Eye, CPA
Utility Financial Officer

FROM: Joellen C. Thompson, P.E.
Water System Manager



SUBJECT: 2013 WATER RATE STUDY - TASK #9

No significant changes in water revenues are anticipated to take effect by January 1, 2014, which would require an adjustment to operating revenue estimates as a whole.

JCT

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 7, 2013

TO: Geri Eye
Utility Finance Officer

FROM: Wayne Jernberg, P.E.
Assistant Water System Manager

SUBJECT: 2013 WATER RATE STUDY- TASK #10

The following are major water system projects (greater than \$100,000) that for rate study purposes should be considered operative as of January 1, 2014.

<u>Description</u>	<u>Location</u>	<u>Proj. Code</u>	<u>Cost</u>
Patterson Elev. Storage Tank	Kentwood	216981-531	\$ 418,076
		221711-520	3,427,445
Taylor & Grove	Grand Rapids	221205-510	210,000
		228022-510	501,727
		221930-531	1,234,273
LMFP – Conc. Rest. Phases 7&8	Integrated	221714-510	166,359
		221714-520	46,891
		221244-531	50,450
		221710-520	590,000
Elmridge – Westwinde to 3 Mile	Walker	221327-510	94,444
	Grand Rapids	221327-510	105,556
Cherry – Eastern to Hollister	Grand Rapids	228057-510	113,406
Jefferson – Fulton to Cherry	Grand Rapids	221214-510	425,273
Kraft – 60 th to 56 th	Cascade	Contribution	355,429
Lake Mich. Dr.– Seward to National	Grand Rapids	221305-510	299,100

WJ

CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
TASK NO. 11

"COMPUTE ACCUMULATED COST, DEPRECIATION AND DEPRECIATION EXPENSE AS OF JUNE 30, 2013"

INTEGRATED SYSTEM

	ORIGINAL COST	ACCUMULATED DEPRECIATION	DEPRECIATION EXPENSE
LAND	\$ 2,507,974	\$ -	\$ -
LAND IMPROVEMENTS	1,987,789	1,296,304	55,528
BUILDINGS & STRUCTURES	46,991,540	21,779,149	872,225
STORAGE	7,584,993	5,321,656	208,204
PROCESS EQUIPMENT	58,083,527	32,007,219	1,773,696
AUXILIARY EQUIPMENT	14,701,826	12,309,601	273,675
METERS	7,375,481	7,375,481	-
MACHINERY & EQUIPMENT	2,961,961	2,596,158	104,331
OFFICE EQUIPMENT & FURNITURE	622,184	622,184	-
WATERMAINS	55,592,968	17,297,693	741,239
	<u>\$ 198,410,243</u>	<u>\$ 100,605,445</u>	<u>\$ 4,028,898</u>

NON-INTEGRATED SYSTEM

	ORIGINAL COST	ACCUMULATED DEPRECIATION	DEPRECIATION EXPENSE
LAND	\$ 1,737,108	\$ -	\$ -
LAND IMPROVEMENTS	1,204,988	821,209	41,327
BUILDINGS & STRUCTURES	11,381,293	3,183,801	246,029
STORAGE	9,461,759	4,934,271	213,078
PROCESS EQUIPMENT	5,117,329	2,650,086	132,794
AUXILIARY EQUIPMENT	5,080,147	2,057,072	221,112
MACHINERY & EQUIPMENT	2,257,526	2,142,548	52,779
OFFICE EQUIPMENT & FURNITURE	533,805	468,376	24,410
WATERMAINS - GRAND RAPIDS	127,121,004	28,548,129	1,625,485
WATERMAINS - WALKER	21,900,956	6,361,813	292,012
WATERMAINS - KENTWOOD	24,919,270	7,006,517	329,010
WATERMAINS - CASCADE TWP	20,150,425	5,121,490	269,889
WATERMAINS - GRAND RAPIDS TWP	17,575,781	3,789,699	229,993
WATERMAINS - TALLMADGE TWP	2,014,737	306,690	26,863
	<u>\$ 250,456,128</u>	<u>\$ 67,391,701</u>	<u>\$ 3,704,781</u>
TOTAL	<u>\$ 448,866,371</u>	<u>\$ 167,997,146</u>	<u>\$ 7,733,679</u>

SOURCE: GENERAL LEDGER, AS ADJUSTED, FOR JUNE 30, 2013.

CITY OF GRAND RAPIDS, MICHIGAN
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
TASK NO. 12

TASK 12A DETERMINE WORKING CAPITAL NEEDS FOR MATERIALS AND SUPPLIES ON HAND.

MATERIALS AND SUPPLIES INVENTORY AS OF JUNE 30, 2013: \$ 1,652,564

TASK 12B DETERMINE WORKING CAPITAL NEEDS FOR PREPAYMENT OF OPERATING COSTS.

NO REQUIREMENT FOR PREPAYMENT OF OPERATING COSTS IS CALLED FOR IN THE ORDINARY CYCLE OF BUSINESS.

TASK 12C DETERMINE CASH WORKING CAPITAL NEEDS & DETERMINE TOTAL WORKING CAPITAL NEEDS.

MINIMUM CASH WORKING CAPITAL IS DEFINED AS THE SUM OF 90 DAYS ADJUSTED OPERATING EXPENSES.

ADJUSTED CURRENT ANNUAL EXPENSES = \$ 22,106,315 @ 90/365 = \$ 5,450,872

TOTAL WORKING CAPITAL NEEDS CONSIST OF THE FOLLOWING:

12A INVESTMENT IN INVENTORY	\$ 1,652,564
12B PREPAYMENT OF OPERATING EXPENSES	-
12C 90 DAY OPERATING EXPENSES	<u>5,450,872</u>
	<u>\$ 7,103,436</u>

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MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 4, 2013

TO: Geri Eye
Utility Financial Officer

FROM: Wayne Jernberg, P.E.
Assistant Water System Manager

SUBJECT: 2013 WATER RATE STUDY- TASK #13

In 2013, several existing zonegated facilities received improvements and new zonegated facilities were established within the City of Grand Rapids Water System. The existing zonegating maps, the Zonegating Cross Reference List and the Joint Use List were all reviewed. From that review, the following are recommended changes for zonegating of the Water System facilities for the 2013 Water Rate Study:

1. Dean Lake Service Center Improvements
 - a. No changes in percentages and allocations should follow those in Zonegated sections W47 and W48.
2. Livingston Pump Station – Power Subyard Improvements
 - a. No changes in percentages and allocations should follow those in Zonegated section W31.
3. Patterson Elevated Storage Tank and Supply Watermain
 - a. This site is new this year and has been assigned Zonegated section W123A. The percentage of allocation for this site should follow those in Zonegated sections W123 and W21.
4. Covell Reservoir and Pump Station
 - a. This facility is not to be zonegated this year. In 2015, an update to the Comprehensive Master Plan will include a review of flow data and our zonegated sections. At that time, a decision will be made on whether to zonegate this facility in the future.
5. Leonard Elevated Storage Tank
 - a. This facility is to be zonegated and the allocations should follow those in Zonegated sections W44 and W39.


WJ

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 14, 2013

TO: Eric R. DeLong
Deputy City Manager

FROM: Geri D. Eye, CPA 
Utility Financial Officer

SUBJECT: **2013 SEWER RATE STUDY TASK #13**
ZONEGATING & JOINT USE ALLOCATION METHODS

Lengths and costs of all interceptor and trunk sewer mains that are zonegated were prorated according to the percentage of flow from contributing communities per the "Report on Sewage Flow Allocation and Zonegating of the Sewage System for Fiscal Year 2002" (Black & Veatch, Ltd. Zonegating Report dated September 2003). Jointly used pumping stations were also prorated based on the B&V zonegating report.

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 24, 2013

TO: Geri Eye
Utility Financial Officer

FROM: Wayne Jernberg, P.E.
Assistant Water System Manager

SUBJECT: 2013 WATER RATE STUDY- TASK #14

Base maps and zoned maps for the water rate study, adjusted and revised to reflect changes are presently being updated to reflect 2013 zoned information. The water maps will be completely updated by the end of calendar year 2013. All 2013 zoned work papers and maps are on file at the Water Administration Building located at 1900 Oak Industrial Dr. NE.

WJ

wrs\wtask14 2013

CITY OF GRAND RAPIDS, MICHIGAN
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
TASK NO. 15

COMPUTE CONSTRUCTION COST RATE BASE (DEPRECIATED PLANT, PLUS WORKING CAPITAL, LESS CONTRIBUTIONS BY OTHERS).


ORIGINAL CONSTRUCTION COST	- TASK #10	\$ 7,155,705	
	- TASK #11	448,866,371	
			\$ 456,022,076
LESS: ACCUMULATED DEPRECIATION	- TASK #11	\$ 167,997,146	
	- TASK #10	-	(167,997,146)
			288,024,930
WORKING CAPITAL REQUIREMENT	- TASK #12	\$ 7,103,436	
			7,103,436
			295,128,366
CONTRIBUTIONS BY OTHERS	- TASK #21	\$ 85,286,305	
LESS: AMORTIZATION		(27,487,733)	
			(57,798,572)
CONSTRUCTION COST RATE BASE			<u>\$ 237,329,794</u>

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 24, 2013

TO: Eric DeLong
Deputy City Manager

FROM: Geri D. Eye, CPA 
Utility Financial Officer

SUBJECT: **2013 WATER RATE STUDY TASK #15A
INTEGRATED WATER CONNECTION FEES**

Attached is the Integrated Water Connection Fee Schedule as currently provided for in Chapter 26 of the City Code, with the addition of rates to be effective on January 1, 2014. The City Commission on June 27, 2000 established fees through calendar year 2004. Beginning January 1, 2005, the integrated water connection fees are to be calculated on a yearly basis as part of the annual Water/Sewer Rate Study. The Consumer Price Index used to determine rates effective January 1, 2014 is as follows:

August, 2012 Index	230.379
August, 2013 Index	233.877
Increase (decrease)	3.498
Percentage increase (decrease)	1.52%

GDE\lw

Attachment

Section 2.35 Integrated Water Connection Fee Schedule

When a property owner or user is requested or required to connect to the System and has not previously paid or been assessed a connection fee, the following connection fee schedule shall apply:

Integrated Connection Base Fee Schedule

Water Meter Size (inches)	<u>1/01/13</u>	<u>1/01/14</u>
3/4 or less	\$ 2,830	\$ 2,873
1	4,730	4,798
1 1/2	9,420	9,567
2	15,080	15,313
3	33,030	33,528
4	59,430	60,333
6 and over	132,080	134,083

Except as otherwise provided in the immediately succeeding paragraph, the foregoing integrated water connection base fee schedule for single-family and multi-family residential dwelling units shall be adjusted upward and downward as follows: A single-family residential dwelling unit located on a parcel containing twenty thousand (20,000) square feet shall pay the applicable integrated connection fee in accordance with the foregoing schedule. When determining the square footage of a residential parcel for the purposes of determining the appropriate integrated connection fee, parcel size may be adjusted downward to take into consideration such things as wetlands, lakes, streams and other unusual characteristics of the parcel in accordance with policies approved from time to time by the Utility Advisory Board. To the extent the size of a parcel, as adjusted, is greater than or less than twenty thousand (20,000) square feet, one-half the applicable integrated connection fee will increase or decrease by the same percentage increase or decrease in the parcel above or below twenty thousand (20,000) square feet. In the case of multi-family residential dwellings, in order to determine the size of the parcel assigned to each dwelling unit for purposes of calculating the integrated connection fee to be paid by each multi-family residential dwelling unit, the total square footage of the parcel, as adjusted, on which the multi-family residential dwelling is located shall be divided by the total number of residential units. Notwithstanding any other provision in this subsection, the integrated connection fee for a single-family residential dwelling unit or multi-family residential dwelling unit shall not exceed four and one-half times the applicable base integrated connection fee set forth in foregoing schedule.

There shall be no upward adjustment in the integrated water service connection fee payable for a single-family residential dwelling unit connecting to the Water System if (a) each of the following conditions are met (1) a building permit shall have been obtained, (2) the dwelling unit shall have been constructed, and (3) a certificate of occupancy shall have been issued prior to January 1, 2000 or (b) local building permit fees have been paid to the local governmental unit prior to January 1, 2000 for a single-family residential dwelling unit to be

constructed on or after January 1, 2000. When connecting to the Water System, Users living in or owning such single-family residential dwelling units shall pay the applicable base integrated connection fee set forth in the Integrated Connection Base Fee Schedule adjusted downward, if applicable, in accordance with the immediate preceding paragraph.

Effective January 1, 2005 and January 1st of every year thereafter, the Integrated Water Connection Base Fees shall be adjusted by a percentage, which is determined by the annual change in the Consumer Price Index (the "index") calculated as follows:

- (1) The Consumer Price Index shall be that Index referred to as the Consumer Price Index, US City Average, All Urban Consumers, published by the U.S. Department of Labor-Bureau of Statistics ((1982-84)=100). In the event the method of determining the Index is substantially altered, the basis for determining the annual change thereafter shall be the Index which is most comparable to the Index described above.
- (2) For the purpose of computing the percentage change each calendar year, the Index for the month of August for the prior calendar year shall be subtracted from the Index for the immediately-preceding August. The result so obtained (if positive) shall be divided by the Index for the month of August for the prior calendar year to obtain the percentage increase which shall be applied to the then current Integrated Water Connection Base Fee Schedule to determine the new calendar year schedule.

The foregoing Integrated Connection fee is due and payable at the time a User receives a permit to connect to the Water System. A permit issued by the City to connect to the Water System shall expire one hundred eighty (180) days from the date the permit was issued.

The user receiving services who applies for a larger water meter than the one presently in service shall pay an Integrated Connection Fee which is the difference in cost between the meter size in service and the one applied for in accordance with the Integrated Connection Fee in effect at the time of application. No credit or rebate shall be made in the case of application for a smaller meter size.

Existing commercial and industrial customers may request the installation of an additional meter to measure water used solely for irrigation purposes. There shall be no Integrated Connection Fee for the additional meter provided combined maximum capacity as defined by the American Water Works Association Standards C700-90 and C702-92, as amended, does not exceed the maximum capacity of the original meter. If the original maximum capacity is exceeded, the customer shall pay as an Integrated Connection Fee the difference between the fee for the original meter and what the fee would be if the maximum capacities of all meters were totaled. The additional Integrated Connection Fee shall be based upon the fees in effect at the time of installation of the additional meter.

**CITY OF GRAND RAPIDS, MICHIGAN
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
TASK NO. 16**

INCLUDE MAJOR PROJECT COST FOR SYSTEM IMPROVEMENTS (NON-INTEGRATED)

THE ESTIMATED TOTAL PROJECT COST FOR RECOMMENDED WATER SYSTEM IMPROVEMENTS ARE
SUMMARIZED IN THE FOLLOWING TABLE.

ITEM NO.	DESCRIPTION	ESTIMATED COST	BUDGET YEAR
1	EAST PARIS SERVICE CENTER IMPROVEMENTS	3,826,500	2013
2	COLDBROOK SCADA IMPROVEMENTS	2,200,000	2014
3	ESCSO #21	700,000	2014
4	ESCSO #22	650,000	2014
5	MAYNARD - VET'S DR TO 3200' NORTH	575,000	2014
6	FOUR MILE ROAD WATER MAIN AND ELEVATED TANK	8,245,000	2015
7	FRANKLIN PS - VFD'S AND NEW MOTOR STARTERS	1,000,000	2015
8	ESCSO #27	1,205,000	2015
9	WILSON PUMP STATION IMPROVEMENTS	790,000	2015
10	LIVINGSTON DISCHARGE LINE	10,970,000	2015
11	ESCSO #28	1,800,000	2016
12	ADAMS/ALGER PRESSURE DISTRICT MODIFICATIONS	1,600,000	2016
13	GARFIELD AVENUE WATERMAIN IMPROVEMENTS	1,050,000	2017
14	CASCADE NORTH RIVER CROSSING	3,600,000	2018
		<u>\$ 38,211,500</u>	

NOTE: NONE OF THE PROJECTS ABOVE ARE INCLUDED IN RECOMMENDED REVENUE REQUIREMENTS FOR CALENDAR YEAR 2014. COSTS SHOWN ARE IN 2013 DOLLARS.

SOURCE: WAYNE JERNBERG, ASSISTANT WATER SYSTEM MANAGER, OCTOBER 2013

CITY OF GRAND RAPIDS, MICHIGAN
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
TASK NO. 17

BONDS - PRINCIPAL & INTEREST PAYMENTS (SENIOR)

FISCAL YEAR ENDING JUNE 30,	CASH BASIS		
	PRINCIPAL	INTEREST	PRIN & INT
2014	\$ 10,180,000	\$ 5,262,333	\$ 15,442,333
2015	10,645,000	4,894,396	15,539,396
2016	11,040,000	4,483,634	15,523,634
2017	11,620,000	3,992,134	15,612,134
2018	12,015,000	3,466,134	15,481,134
2019	5,375,000	2,902,984	8,277,984
2020	5,640,000	2,665,284	8,305,284
2021	2,045,000	2,416,709	4,461,709
2022	2,145,000	2,319,409	4,464,409
2023	2,255,000	2,216,971	4,471,971
2024	2,380,000	2,108,971	4,488,971
2025	2,500,000	1,994,840	4,494,840
2026	2,635,000	1,874,790	4,509,790
2027	2,770,000	1,747,840	4,517,840
2028	2,920,000	1,614,440	4,534,440
2029	2,765,000	1,479,015	4,244,015
2030	2,895,000	1,348,890	4,243,890
2031	3,040,000	1,202,940	4,242,940
2032	3,195,000	1,049,680	4,244,680
2033	3,355,000	888,605	4,243,605
2034	3,520,000	719,465	4,239,465
2035	3,700,000	542,005	4,242,005
2036	1,615,000	355,470	1,970,470
2037	1,695,000	273,105	1,968,105
2038	1,785,000	186,660	1,971,660
2039	1,875,000	95,625	1,970,625
	\$ 115,605,000	\$ 52,102,329	\$ 167,707,329

**CITY OF GRAND RAPIDS, MICHIGAN
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
TASK NO. 18**

DETERMINE WATER SYSTEM EQUITY IN THE CONSTRUCTION COST RATE BASE BY
SUBTRACTING DEBT OUTSTANDING FROM THE TOTAL RATE BASE.

CONSTRUCTION COST RATE BASE - TASK NO. 15	\$ 237,329,794
LESS: BONDED INDEBTEDNESS - TASK NO. 17/20	(118,328,891)
NET WATER SYSTEM EQUITY	<u><u>\$ 119,000,903</u></u>

**CITY OF GRAND RAPIDS, MICHIGAN
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE OF RETURN ON EQUITY - TASK NO. 19**

AT THE APRIL 5, 1977, COMMITTEE OF THE WHOLE MEETING, THE CITY COMMISSION DECIDED THE LEVEL OF RETURN ON WATER SYSTEM EQUITY. THE LEVEL DECIDED UPON WAS ONE PERCENT MORE THAN THE AVERAGE BOND BUYER'S INDEX OF MUNICIPAL BONDS FOR THE PREVIOUS TWELVE MONTH PERIOD.

BOND BUYER'S INDEX OF 20 MUNICIPAL BONDS

<u>DATE</u>	<u>RATE</u>	<u>DATE</u>	<u>RATE</u>
04-Oct-12	3.610%	04-Apr-13	3.960%
11-Oct-12	3.640%	11-Apr-13	3.930%
18-Oct-12	3.680%	18-Apr-13	3.890%
25-Oct-12	3.680%	25-Apr-13	3.900%
01-Nov-12	3.670%	02-May-13	3.770%
08-Nov-12	3.550%	09-May-13	3.670%
15-Nov-12	3.410%	16-May-13	3.610%
22-Nov-12	3.370%	23-May-13	3.700%
29-Nov-12	3.290%	30-May-13	3.840%
06-Dec-12	3.270%	06-Jun-13	3.930%
13-Dec-12	3.440%	13-Jun-13	4.160%
20-Dec-12	3.640%	20-Jun-13	4.370%
27-Dec-12	3.580%	27-Jun-13	4.630%
03-Jan-13	3.680%	04-Jul-13	4.390%
10-Jan-13	3.600%	11-Jul-13	4.550%
17-Jan-13	3.530%	18-Jul-13	4.520%
24-Jan-13	3.540%	25-Jul-13	4.770%
31-Jan-13	3.670%	01-Aug-13	4.700%
07-Feb-13	3.680%	08-Aug-13	4.730%
14-Feb-13	3.720%	15-Aug-13	4.800%
21-Feb-13	3.740%	22-Aug-13	4.910%
28-Feb-13	3.740%	29-Aug-13	4.960%
07-Mar-13	3.860%	05-Sep-13	5.030%
14-Mar-13	4.000%	12-Sep-13	4.930%
21-Mar-13	3.990%	19-Sep-13	4.660%
28-Mar-13	3.990%	26-Sep-13	4.530%
		<u>52 WEEKS</u>	<u>3.989%</u>

CITY OF GRAND RAPIDS, MICHIGAN
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
TASK NO. 20

DETERMINE COMPOSITE RATE OF RETURN AND DOLLARS OF RETURN ON A CONSTRUCTION COST RATE BASE.

	<u>RATE BASE</u>		<u>RATE OF RETURN</u>		<u>RETURN ON INVESTMENT</u>
WATER SYSTEM EQUITY IN THE CONSTRUCTION COST RATE (CCR) BASE	\$ 119,000,903	@	4.989%	=	\$ 5,936,955
WATER SYSTEM INDEBTEDNESS IN THE CCR BASE -1993 Bonds (<i>Fixed Rate Conversion</i>)	21,900,000	@	5.860%	=	1,283,340
-2000 Bonds	-	@	5.750%	=	-
-2005 Bonds	30,185,000	@	4.850%	=	1,463,973
-2009 Bonds (Amt in CCRB)	26,618,331	@	4.980%	=	1,325,593
-2010 Bonds (Refunded 2000 bonds)	31,825,000	@	4.590%	=	1,460,768
-2013 Bonds	3,385,000	@	2.760%	=	93,426
-2011-2012 DWRF Bonds (Amt in CCRB)	3,830,547	@	2.500%	=	95,764
-2012 DWRF Bonds (Amt in CCRB)	585,013	@	2.000%	=	11,700
LESS: INTEREST EARNED DURING THE TEST PERIOD ON BOND RESERVE & REPLACEMENT ACCOUNTS					(6,604)
	\$ 237,329,794				\$ 11,664,915
COMPOSITE RATE OF RETURN ON INVESTMENT			$\frac{\$11,664,915}{237,329,794}$	=	4.915%

CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
CONSTRUCTION COST RATE BASE & RETURN ON INVESTMENT- TASK NO. 21- PART 1
FISCAL YEAR ENDED JUNE 30, 2013

PHYSICAL LOCATION

DESCRIPTION	INTEGRATED SYSTEM	RETAIL							WHOLESALE			TOTAL
		CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	CITY OF EAST GR	COUNTY OF OTTAWA	ADA TOWNSHIP		
COST	\$ 199,263,943	\$ 150,339,798	\$ 22,594,072	\$ 26,937,896	\$ 20,145,462	\$ 15,998,459	\$ 2,014,737	\$ -	\$ -	\$ -	\$ 437,294,367	
LESS: ACCUMULATED DEPRECIATION	100,605,445	39,888,613	6,527,174	7,553,234	5,120,167	3,461,974	306,690	-	-	-	163,463,297	
NET BOOK VALUE	\$ 98,658,498	\$ 110,451,185	\$ 16,066,898	\$ 19,384,662	\$ 15,025,295	\$ 12,536,485	\$ 1,708,047	\$ -	\$ -	\$ -	\$ 273,831,070	
WORKING CAPITAL REQUIREMENT	3,336,910	2,451,041	348,992	391,044	292,733	221,911	16,338	18,895	-	25,572	7,103,436	
	\$ 101,995,408	\$ 112,902,226	\$ 16,415,890	\$ 19,775,706	\$ 15,318,028	\$ 12,758,396	\$ 1,724,385	\$ 18,895	\$ -	\$ 25,572	\$ 280,934,506	
CONTRIBUTIONS	242,824	20,586,793	17,209,824	16,520,894	16,289,248	12,368,515	2,014,737	-	-	-	85,232,835	
LESS AMORTIZATION	(8,094)	(10,313,346)	(5,011,528)	(4,471,146)	(4,402,405)	(2,918,577)	(311,243)	-	-	-	(27,436,339)	
	\$ (234,730)	\$ (10,273,447)	\$ (12,198,296)	\$ (12,049,748)	\$ (11,886,843)	\$ (9,449,938)	\$ (1,703,494)	\$ -	\$ -	\$ -	\$ (57,796,496)	
CONSTRUCTION COST RATE BASE	\$ 101,760,678	\$ 102,628,779	\$ 4,217,594	\$ 7,725,958	\$ 3,431,185	\$ 3,308,458	\$ 20,891	\$ 18,895	\$ -	\$ 25,572	\$ 223,138,010	
RETURN ON INVESTMENT- TASK 4/5		114,302									\$ 114,302	
RETURN ON INVESTMENT- TASK 20	4.915%	\$ 5,001,537	\$ 4,929,902	\$ 207,295	\$ 379,731	\$ 168,643	\$ 162,611	\$ 1,027	\$ 929	\$ -	\$ 1,257	\$ 10,852,932

ZONEGATED

COST	\$ -	\$ (5,310,924)	\$ 605,499	\$ 5,010,709	\$ 9,266,816	\$ 4,045,216	\$ 175,909	\$ 1,349,929	\$ -	\$ 3,584,555	\$ 18,727,709
LESS: ACCUMULATED DEPRECIATION	-	(2,730,132)	445,657	1,583,210	2,481,877	1,279,307	82,324	363,764	-	1,027,842	4,533,849
NET BOOK VALUE	\$ -	\$ (2,580,792)	\$ 159,842	\$ 3,427,499	\$ 6,784,939	\$ 2,765,909	\$ 93,585	\$ 986,165	\$ -	\$ 2,556,713	\$ 14,193,860
WORKING CAPITAL REQUIREMENT	-	-	-	-	-	-	-	-	-	-	-
	\$ -	\$ (2,580,792)	\$ 159,842	\$ 3,427,499	\$ 6,784,939	\$ 2,765,909	\$ 93,585	\$ 986,165	\$ -	\$ 2,556,713	\$ 14,193,860
CONTRIBUTIONS	-	-	-	14,725	3,670	24,969	-	-	-	10,106	53,470
LESS AMORTIZATION	-	-	-	(14,153)	(3,528)	(23,999)	-	-	-	(9,714)	(51,394)
	\$ -	\$ -	\$ -	\$ (572)	\$ (142)	\$ (970)	\$ -	\$ -	\$ -	\$ (392)	\$ (2,076)
CONSTRUCTION COST RATE BASE	\$ -	\$ (2,580,792)	\$ 159,842	\$ 3,426,927	\$ 6,784,797	\$ 2,764,939	\$ 93,585	\$ 986,165	\$ -	\$ 2,556,321	\$ 14,191,784
RETURN ON INVESTMENT- TASK 19/20	\$ -	\$ (219,083)	\$ 13,569	\$ 290,912	\$ 575,961	\$ 234,716	\$ 7,944	\$ 83,716	\$ -	\$ 217,006	\$ 1,204,741
RETURN ON INVESTMENT- TASK 19/20	8.489%	8.489%	8.489%	8.489%	8.489%	8.489%	8.489%	8.489%	4.915%	8.489%	
TOTAL RETURN ON INVESTMENT	\$ 5,001,537	\$ 4,710,819	\$ 220,864	\$ 670,643	\$ 744,604	\$ 397,327	\$ 8,971	\$ 84,645	\$ -	\$ 218,263	\$ 12,057,673

CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
CONSTRUCTION COST & ACCUMULATED DEPRECIATION- TASK NO. 21- PART 2
FISCAL YEAR ENDED JUNE 30, 2013

CONSTRUCTION COST

COST CENTER	AMOUNT	INTEGRATED SYSTEM	RETAIL						WHOLESALE			TOTAL
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	CITY OF EAST GR	COUNTY OF OTTAWA	ADA TOWNSHIP	
BY PHYSICAL LOCATION- TASK 11		\$ 198,410,243	\$ 160,824,270	\$ 22,183,608	\$ 27,157,367	\$ 20,150,425	\$ 17,575,781	\$ 2,014,737	\$ -	\$ -	\$ -	\$ 448,866,371
IN SERVICE- TASK 10		853,700	2,889,335	94,444	3,318,226	-	-	-	-	-	-	7,155,705
PUMPING STATIONS:												
KNAPP SERVICE CENTER	\$ 3,368,233		(1,561,985)	-	430,157	107,211	729,391	-	-	-	295,226	-
LIVINGSTON	2,090,217		(383,722)	-	105,828	26,211	179,173	-	-	-	72,510	-
FRANKLIN	6,949,487		(3,962,042)	-	1,623,122	866,115	392,368	-	602,799	-	477,638	-
LEFFINGWELL	141,009		(65,390)	-	18,008	4,488	30,535	-	-	-	12,359	-
BRISTOL	842,730		-	-	-	-	-	-	-	-	-	-
EAST RAPIDS	1,113,213		-	-	624,244	184,754	-	-	-	-	-	-
BURTON	215,899		-	-	-	-	-	-	-	-	-	-
STORAGE TANKS:												
ELKS	236,335		(180,449)	174,815	-	-	-	5,634	-	-	-	-
KNAPP	118,570		(21,767)	-	6,003	1,487	10,164	-	-	-	4,113	-
CAMBRIDGE	116,070		(90,259)	-	74,602	6,200	-	-	9,457	-	-	-
PATTERSON	3,145,527		-	-	1,852,772	1,602,772	-	-	-	-	-	-
WATERMAINS			(12,419,117)	196,764	1,892,328	5,573,105	1,126,263	170,275	737,673	-	2,722,709	-
ADJUSTED BY ZONEGATING		\$ 199,263,943	\$ 145,028,874	\$ 23,199,571	\$ 31,948,605	\$ 29,412,278	\$ 20,043,675	\$ 2,190,646	\$ 1,349,929	\$ -	\$ 3,584,555	\$ 456,022,076
LESS: ZONEGATING ADJUSTMENT		\$ -	\$ (5,310,924)	\$ 605,499	\$ 5,010,709	\$ 9,266,816	\$ 4,045,216	\$ 175,909	\$ 1,349,929	\$ -	\$ 3,584,555	\$ 18,727,709
PHYSICAL LOCATION		\$ 199,263,943	\$ 150,339,798	\$ 22,594,072	\$ 26,937,896	\$ 20,145,462	\$ 15,998,459	\$ 2,014,737	\$ -	\$ -	\$ -	\$ 437,294,367

ACCUMULATED DEPRECIATION

BY PHYSICAL LOCATION- TASK 11		\$ 100,605,445	\$ 42,998,879	\$ 6,843,519	\$ 1,583,325	\$ 5,121,490	\$ 3,789,699	\$ 306,690	\$ -	\$ -	\$ -	\$ 167,997,146
IN SERVICE- TASK 10												-
PUMPING STATIONS:												
KNAPP SERVICE CENTER	\$ 1,896,468		(879,468)	-	242,198	60,365	410,680	-	-	-	166,225	-
LIVINGSTON	795,782		(146,089)	-	40,290	9,979	68,214	-	-	-	27,606	-
FRANKLIN	2,655,832		(1,514,142)	-	620,296	330,996	149,948	-	230,367	-	182,535	-
LEFFINGWELL	135,560		(62,865)	-	17,312	4,315	29,356	-	-	-	11,882	-
BRISTOL	283,812		-	-	-	-	-	-	-	-	-	-
EAST RAPIDS	1,020,800		-	-	(737,061)	737,061	-	-	-	-	-	-
BURTON	28,893		-	-	-	-	-	-	-	-	-	-
STORAGE TANKS:												
ELKS	236,335		(180,449)	174,815	-	-	-	5,634	-	-	-	-
KNAPP	116,070		(21,309)	-	5,877	1,456	9,950	-	-	-	4,026	-
CAMBRIDGE	116,070		(90,259)	-	74,602	6,200	-	-	9,457	-	-	-
PATTERSON	-		-	-	-	-	-	-	-	-	-	-
WATERMAINS			(2,943,817)	157,398	336,605	1,330,182	283,434	76,690	123,940	-	635,568	-
ADJUSTED BY ZONEGATING		\$ 100,605,445	\$ 37,158,481	\$ 6,972,831	\$ 9,136,444	\$ 7,602,044	\$ 4,741,281	\$ 389,014	\$ 363,764	\$ -	\$ 1,027,842	\$ 167,997,146
LESS: ZONEGATING ADJUSTMENT		\$ -	\$ (2,730,132)	\$ 445,657	\$ 1,583,210	\$ 2,481,877	\$ 1,279,307	\$ 82,324	\$ 363,764	\$ -	\$ 1,027,842	\$ 4,533,849
PHYSICAL LOCATION		\$ 100,605,445	\$ 39,888,613	\$ 6,527,174	\$ 7,553,234	\$ 5,120,167	\$ 3,461,974	\$ 306,690	\$ -	\$ -	\$ -	\$ 163,463,297

CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
CONTRIBUTIONS & AMORTIZED CONTRIBUTIONS- TASK NO. 21- PART 3
FISCAL YEAR ENDED JUNE 30, 2013

CONTRIBUTIONS BY OTHERS

COST CENTER	AMOUNT	INTEGRATED SYSTEM	RETAIL						WHOLESALE			TOTAL
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	CITY OF EAST GR	COUNTY OF OTTAWA	ADA TOWNSHIP	
2012 RATE STUDY- LOCATION		\$ -	\$ 20,300,056	\$ 17,194,574	\$ 16,520,894	\$ 16,256,535	\$ 11,772,846	\$ 2,014,737	\$ -	\$ -	\$ -	\$ 84,059,642
ADDITIONS:												
FRONT FOOT FEES			19,648	15,250	-	32,713	79,665	-	-	-	-	147,276
FIXED ASSET CONTRIBUTIONS			267,089	-	-	-	516,004	-	-	-	-	783,093
GRANT RECEIVED IN FY12		242,824										242,824
		242,824	20,586,793	17,209,824	16,520,894	16,289,248	12,368,515	2,014,737	-	-	-	85,232,835
PUMPING STATIONS:												
LEFFINGWELL	\$ 115,303			-	14,725	3,670	24,969	-	-	-	10,106	53,470
ADJUSTED BY ZONEGATING		242,824	20,586,793	17,209,824	16,535,619	16,292,918	12,393,484	2,014,737	-	-	10,106	85,286,305
LESS: ZONEGATING ADJUSTMENT		-	-	-	14,725	3,670	24,969	-	-	-	10,106	53,470
PHYSICAL LOCATION		242,824	20,586,793	17,209,824	16,520,894	16,289,248	12,368,515	2,014,737	-	-	-	85,232,835
AMORTIZED CONTRIBUTIONS												
2012 RATE STUDY- LOCATION		\$ -	\$ 10,035,837	\$ 4,778,197	\$ 4,248,385	\$ 4,183,931	\$ 2,755,085	\$ 284,380	\$ -	\$ -	\$ -	\$ 26,285,815
CURRENT YEAR ADJUSTMENTS		8,094	277,509	233,331	222,761	218,474	163,492	26,863				1,150,524
PRIOR PERIOD ADJUSTMENT			-									-
		8,094	10,313,346	5,011,528	4,471,146	4,402,405	2,918,577	311,243	-	-	-	27,436,339
PUMPING STATIONS:												
LEFFINGWELL	110,824			-	14,153	3,528	23,999	-	-	-	9,714	51,394
ADJUSTED BY ZONEGATING		8,094	10,313,346	5,011,528	4,485,299	4,405,933	2,942,576	311,243	-	-	9,714	27,487,733
LESS: ZONEGATING ADJUSTMENT		-	-	-	14,153	3,528	23,999	-	-	-	9,714	51,394
PHYSICAL LOCATION		8,094	10,313,346	5,011,528	4,471,146	4,402,405	2,918,577	311,243	-	-	-	27,436,339

CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
RECONCILIATION OF CONSTRUCTION COST & ACCUMULATED DEPRECIATION- PHYSICAL LOCATION & ZONEGATING
FISCAL YEAR ENDED JUNE 30, 2013

CONSTRUCTION COST- BY PHYSICAL LOCATION

COST CENTER	AMOUNT	INTEGRATED SYSTEM	RETAIL						WHOLESALE			TOTAL
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	CITY OF EAST GR	COUNTY OF OTTAWA	ADA TOWNSHIP	
COST BY PHYSICAL LOCATION- TASK 11		\$ 198,410,243	\$ 198,410,243	\$ 21,593,335	\$ 1,036,162,274	\$ 20,150,425	\$ 17,575,781	\$ 2,014,737	\$ -	\$ -	\$ -	\$ 448,866,371
IN SERVICE- TASK 10		853,700	2,889,335	94,444	3,318,226	-	-	-	-	-	-	7,155,705
BRISTOL			(612,700)	612,700								-
EAST PARIS			(1,710,802)		1,710,802							-
BURTON			(219,892)	219,892								-
PATTERSON TANK			(527,295)		527,295							-
WATERMAINS												
LESS: WATERMAINS-TOTAL SUBS-HOME COMM			(20,287,069)	(725,425)	(6,940,652)	(6,200)	(2,208,247)	-	-	-	-	(30,167,593)
ADD: WATERMAINS-TOTAL ADDS-HOME COMM			6,913,263	491,505	3,402,954	1,237	630,925	-	-	-	-	11,439,884
TOTAL-PHYSICAL LOCATION COST		\$ 199,263,943	\$ 150,339,799	\$ 22,594,072	\$ 26,937,895	\$ 20,145,462	\$ 15,998,459	\$ 2,014,737	\$ -	\$ -	\$ -	\$ 437,294,367

CONSTRUCTION COST- ZONEGATING

PUMPING STATIONS:												
KNAPP SERVICE CENTER	\$ 3,368,233		\$ (1,561,985)	\$ -	\$ 430,157	\$ 107,211	\$ 729,391	\$ -	\$ -	\$ -	\$ 295,226	\$ -
LIVINGSTON	2,090,217		(383,722)	-	105,828	26,211	179,173	-	-	-	72,510	-
FRANKLIN	6,949,487		(3,962,042)	-	1,623,122	866,115	392,368	-	602,799	-	477,638	-
LEFFINGWELL	141,009		(65,390)	-	18,008	4,488	30,535	-	-	-	12,359	-
BRISTOL	612,700		-	-	-	-	-	-	-	-	-	-
EAST PARIS	1,710,802		-	-	(324,704)	824,264	-	-	-	-	-	-
BURTON	219,892		-	-	-	-	-	-	-	-	-	-
STORAGE TANKS:												
ELKS	236,335		(180,449)	174,815	-	-	-	5,634	-	-	-	-
KNAPP	118,570		(21,767)	-	6,003	1,487	10,164	-	-	-	4,113	-
CAMBRIDGE	116,070		(90,259)	-	74,602	6,200	-	-	9,457	-	-	-
PATTERSON	3,845,521		-	-	(1,852,772)	1,852,772	-	-	-	-	-	-
WATERMAINS- ZONEGATED COST			954,690	430,684	5,430,025	5,578,068	2,703,585	170,275	737,673	-	2,722,709	18,727,709
TOTAL- ZONEGATED COST		\$ -	\$ (5,310,924)	\$ 605,499	\$ 5,010,709	\$ 9,266,816	\$ 4,045,216	\$ 175,909	\$ 1,349,929	\$ -	\$ 3,584,555	\$ 18,727,709
GRAND TOTAL- COST		\$ 199,263,943	\$ 145,028,875	\$ 23,199,571	\$ 31,948,604	\$ 29,412,278	\$ 20,043,675	\$ 2,190,646	\$ 1,349,929	\$ -	\$ 3,584,555	\$ 456,022,076

ACCUMULATED DEPRECIATION-BY PHYSICAL LOCATION

ACC DEPREC BY PHYSICAL LOCATION- TASK 11	\$ 100,605,445	\$ 44,805,492	\$ 6,361,813	\$ 7,006,517	\$ 5,121,490	\$ 3,789,699	\$ 306,690	\$ -	\$ -	\$ -	\$ 167,997,146
BRISTOL		(253,912)	253,912								-
EAST PARIS		(1,529,808)		1,529,808							-
BURTON		(24,893)	24,893								-
WATERMAINS											
LESS: WATERMAINS-TOTAL SUBS-HOME COMM		(4,754,683)	(376,803)	(1,957,966)	(1,653)	(515,265)	-	-	-	-	(7,607,370)
ADD: WATERMAINS-TOTAL ADDS-HOME COMM		1,646,415	263,360	974,875	330	188,540	-	-	-	-	3,073,520
TOTAL-PHYSICAL LOCATION ACC DEP	\$ 100,605,445	\$ 39,888,611	\$ 6,527,175	\$ 7,553,234	\$ 5,120,167	\$ 3,461,974	\$ 306,690	\$ -	\$ -	\$ -	\$ 163,463,296

ACCUMULATED DEPRECIATION-ZONEGATING

PUMPING STATIONS:											
KNAPP SERVICE CENTER	\$ 1,896,468	\$ (879,468)	\$ -	\$ 242,198	\$ 60,365	\$ 410,680	\$ -	\$ -	\$ -	\$ 166,225	\$ -
LIVINGSTON	795,782	(146,089)	-	40,290	9,979	68,214	-	-	-	27,606	-
FRANKLIN	2,655,832	(1,514,142)	-	620,296	330,996	149,948	-	230,367	-	182,535	-
LEFFINGWELL	135,560	(62,865)	-	17,312	4,315	29,356	-	-	-	11,882	-
BRISTOL	253,912	-	-	-	-	-	-	-	-	-	-
EAST PARIS	1,529,808	-	-	(737,061)	737,061	-	-	-	-	-	-
BURTON	24,893	-	-	-	-	-	-	-	-	-	-
STORAGE TANKS:											
ELKS	236,335	(180,449)	174,815	-	-	-	5,634	-	-	-	-
KNAPP	116,070	(21,309)	-	5,877	1,456	9,950	-	-	-	4,026	-
CAMBRIDGE	116,070	(90,259)	-	74,602	6,200	-	-	9,457	-	-	-
PATTERSON	-	-	-	-	-	-	-	-	-	-	-
WATERMAINS- ZONEGATED ACC DEP		164,449	270,842	1,319,696	1,331,505	611,159	76,690	123,940	-	635,568	4,533,849
TOTAL- ZONEGATED ACC DEP	\$ -	\$ (2,730,132)	\$ 445,657	\$ 1,583,210	\$ 2,481,877	\$ 1,279,307	\$ 82,324	\$ 363,764	\$ -	\$ 1,027,842	\$ 4,533,849
GRAND TOTAL- ACC DEP	\$ 100,605,445	\$ 37,158,479	\$ 6,972,832	\$ 9,136,444	\$ 7,602,044	\$ 4,741,281	\$ 389,014	\$ 363,764	\$ -	\$ 1,027,842	\$ 167,997,145

CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ADJUSTED OPERATING EXPENSE ZONEGATED BY GOVERNMENTAL UNIT - TASK #22
FISCAL YEAR ENDED JUNE 30, 2013

COST CENTER	ADJUSTED EXPENSE BY COST CENTER	INTEGRATED SYSTEM	RETAIL						WHOLESALE		
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	CITY OF EAST GR	COUNTY OF OTTAWA	ADA TOWNSHIP
FILTRATION PLANT	\$ 6,687,356	\$ 6,687,356									
PUMPING STATIONS:											
A. PRIMARY TRANSPORT	1,887,292	1,887,292									
B. INTERMEDIATE TRANSPORT	1,173,478		582,683	26,282	247,593	173,898	56,316	-	41,803	-	44,903
WATERMAINS:											
A. PRIMARY TRANSPORT	291,672		149,889	28,628	52,798	30,879	12,813	650	6,606	-	9,409
B. INTERMEDIATE TRANSPORT	1,493,979		558,688	310,210	257,562	217,613	114,469	23,978	105	-	11,354
C. LOCAL DISTRIBUTION	4,044,284		2,981,365	313,796	273,879	215,722	247,510	12,012	-	-	-
RETAIL CUSTOMER METERING *	2,675,290		2,025,702	217,902	173,038	114,155	139,062	5,431			
SUBTOTAL OPERATING EXPENSE	18,253,351	8,574,648	6,298,327	896,818	1,004,870	752,267	570,170	42,071	48,514	-	65,666
ENGINEERING SERVICES	1,048,076	492,343	361,639	51,492	57,697	43,191	32,742	2,411	2,788	-	3,773
ADMINISTRATIVE EXPENSE	2,804,888	1,317,624	967,827	137,804	154,409	115,589	87,625	6,451	7,461	-	10,098
TOTAL	<u>\$ 22,106,315</u>	<u>\$ 10,384,615</u>	<u>\$ 7,627,793</u>	<u>\$ 1,086,114</u>	<u>\$ 1,216,976</u>	<u>\$ 911,047</u>	<u>\$ 690,537</u>	<u>\$ 50,933</u>	<u>\$ 58,763</u>	<u>\$ -</u>	<u>\$ 79,537</u>

* Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

METHOD OF DISTRIBUTION

FILTRATION PLANTS		100.00%	100.00%								
PUMPING STATIONS											
A. PRIMARY TRANSPORT		100.00%	100.00%								
B. INTERMEDIATE TRANSPORT		100.00%		49.655%	2.240%	21.099%	14.819%	4.799%	3.562%		3.826%
MEMO											
WATERMAINS											
TOTAL MILES:	1,164.84										
A. PRIMARY TRANSPORT		100.000%	51.389%	9.815%	18.102%	10.587%	4.393%	0.223%	2.265%		3.226%
MILES	58.28		29.95	5.72	10.55	6.17	2.56	0.13	1.32	-	1.88
B. INTERMEDIATE TRANSPORT		100.000%	37.396%	20.764%	17.240%	14.566%	7.662%	1.605%	0.007%		0.760%
MILES	298.50		111.63	61.98	51.46	43.48	22.87	4.79	0.02	-	2.27
C. LOCAL DISTRIBUTION		100.000%	73.718%	7.759%	6.772%	5.334%	6.120%	0.297%			
MILES	808.06		595.69	62.70	54.72	43.10	49.45	2.40	-	-	-
RETAIL CUSTOMER METERING (1)		100.000%	75.719%	8.145%	6.468%	4.267%	5.198%	0.203%			
NUMBER OF METERS	80,150.00		60,689.00	6,528.00	5,184.00	3,420.00	4,166.00	163.00			
ENGINEERING SERVICES (2)		100.000%	46.976%	34.505%	4.913%	5.505%	4.121%	3.124%	0.230%	0.266%	0.360%
ADMINISTRATIVE EXPENSE (3)		100.000%	46.976%	34.505%	4.913%	5.505%	4.121%	3.124%	0.230%	0.266%	0.360%

NOTES:

(1) ALLOCATION BASED ON NUMBER OF METERS.

(2) ALLOCATION BASED ON DIRECT OPERATING EXPENSE.

(3) ALLOCATION BASED ON DIRECT OPERATING EXPENSE, ADJUSTED FOR ANY COST ASSIGNABLE EXCLUSIVELY TO GR OR RETAIL COMMUNITIES, IF APPLICABLE.

**CITY OF GRAND RAPIDS, MICHIGAN
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
TASK NO. 23**

ASSIGN OTHER OPERATING REVENUES TO EACH GOVERNMENTAL ENTITY. *

BASIS OF ALLOCATION: RETAIL BILLINGS BY GOVERNMENTAL ENTITY - TASK NO. 6 & 7

	RETAIL BILLINGS	PERCENTAGE OF TOTAL	ALLOCATION *
CITY OF GRAND RAPIDS	\$ 24,197,181	64.6532%	\$ 724,182
CITY OF WALKER	3,210,339	8.5778%	96,080
CITY OF KENTWOOD	4,436,882	11.8550%	132,788
CASCADE TOWNSHIP	3,127,219	8.3557%	93,592
GRAND RAPIDS TOWNSHIP	2,334,745	6.2383%	69,875
TALLMADGE TOWNSHIP	119,782	0.3200%	3,584
	<u>\$ 37,426,148</u>	<u>100.0000%</u>	<u>\$ 1,120,101</u>

* Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ASSIGN DEPRECIATION EXPENSE TO CUSTOMER COMMUNITIES- TASK NO. 24
FISCAL YEAR ENDED JUNE 30, 2013

COST CENTER	DEPRECIATION EXPENSE	INTEGRATED SYSTEM	RETAIL						WHOLESALE			TOTAL
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	CITY OF EAST GR	COUNTY OF OTTAWA	ADA TOWNSHIP	
BY PHYSICAL LOCATION- TASK 11		\$ 4,028,898	\$ 2,504,035	\$ 320,329	\$ 353,672	\$ 269,889	\$ 229,993	\$ 26,863	\$ -	\$ -	\$ -	\$ 7,733,679
IN SERVICE- TASK 10		24,391	38,524	1,259	96,443	-	-	-	-	-	-	160,617
PUMPING STATIONS:												
KNAPP SERVICE CENTER	\$ 92,165		(42,740)	-	11,770	2,934	19,958	-	-	-	8,078	-
LIVINGSTON	51,792		(9,508)	-	2,622	649	4,440	-	-	-	1,797	-
FRANKLIN	208,505		(118,873)	-	48,698	25,986	11,772	-	18,086	-	14,331	-
LEFFINGWELL	908		(422)	-	116	29	197	-	-	-	80	-
BRISTOL	15,870											-
EAST PARIS	24,662		-	-	(11,882)	11,882	-	-	-	-	-	-
BURTON	12,447											-
STORAGE TANKS:												
ELKS	-		-	-	-	-	-	-	-	-	-	-
KNAPP	-		-	-	-	-	-	-	-	-	-	-
CAMBRIDGE	-		-	-	-	-	-	-	-	-	-	-
PATTERSON	96,443		-	-	(46,466)	46,466	-	-	-	-	-	-
WATERMAINS			(165,166)	2,624	25,036	74,292	15,017	2,270	9,624	-	36,303	-
ADJUSTED BY ZONEGATING		4,053,289	2,205,850	324,212	480,009	432,127	281,377	29,133	27,710	-	60,589	7,894,296
LESS DEPR ON CIS (TASK 4/5)			(169,709)									(169,709)
LESS CONTRIBUTIONS AMORTIZED												
TASK NO. 21		(8,094)	(277,509)	(233,331)	(222,761)	(218,474)	(163,492)	(26,863)	-	-	-	(1,150,524)
TOTAL		<u>\$ 4,045,195</u>	<u>\$ 1,758,632</u>	<u>\$ 90,881</u>	<u>\$ 257,248</u>	<u>\$ 213,653</u>	<u>\$ 117,885</u>	<u>\$ 2,270</u>	<u>\$ 27,710</u>	<u>\$ -</u>	<u>\$ 60,589</u>	<u>\$ 6,574,063</u>

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CITY OF GRAND RAPIDS, MICHIGAN
WATER SUPPLY SYSTEM FUND
ACCUMULATE REVENUE REQUIREMENTS BY CUSTOMER COMMUNITIES- TASK NO. 25
FISCAL YEAR ENDED JUNE 30, 2013

COST CENTER	INTEGRATED SYSTEM	RETAIL						WHOLESALE			TOTAL
		CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	CITY OF EAST GR	COUNTY OF OTTAWA	ADA TOWNSHIP	
OPERATION & MAINTENANCE											
EXPENSE- TASK NO. 22	\$ 10,384,615	\$ 7,627,793	\$ 1,086,114	\$ 1,216,976	\$ 911,047	\$ 690,537	\$ 50,933	\$ 58,763	\$ -	\$ 79,537	\$ 22,106,315
DEPRECIATION EXPENSE											
TASK NO. 24	4,045,195	1,758,632	90,881	257,248	213,653	117,885	2,270	27,710	-	60,589	6,574,063
RETURN ON SYSTEM INVESTMENT											
TASK NO. 21	5,001,537	4,710,819	220,864	670,643	744,604	397,327	8,971	84,645	-	218,263	12,057,673
REVENUE CREDITS- TASK NO. 23	-	(724,182)	(96,080)	(132,788)	(93,592)	(69,875)	(3,584)	-	-	-	(1,120,101)
ALLOCATE:											
INTEG CONN. FEE CREDIT (A)	-	(446,208)	(83,037)	(95,444)	(61,337)	(43,778)	(3,865)	(31,582)	-	(37,808)	(803,059)
INTEGRATED SYSTEM (A)	(19,431,347)	10,047,976	1,869,864	2,149,250	1,381,196	985,799	87,026	711,169	1,347,691	851,376	-
LESS: CIRCUIT BREAKER (B)		-	(1,196)	-	(150,424)	-	(16,523)				(168,143)
	<u>\$ -</u>	<u>\$ 22,974,830</u>	<u>\$ 3,087,410</u>	<u>\$ 4,065,885</u>	<u>\$ 2,945,147</u>	<u>\$ 2,077,895</u>	<u>\$ 125,228</u>	<u>\$ 850,705</u>	<u>\$ 1,347,691</u>	<u>\$ 1,171,957</u>	<u>\$ 38,646,748</u>

(A) ALLOCATED ON THE BASIS OF RELATIVE BILLED VOLUME & LAND AREA TO UAB PARTNERS. OTTAWA'S ALLOCATION IS BASED ON OLD CONTRACT AND EXCLUDES ANY COST OF COLDBROOK PUMPING.

(B) PURSUANT TO CITY AND CUSTOMER COMMUNITY CIRCUIT BREAKER, AS PROVIDED FOR BY THE THIRD AMENDMENT TO THE UNIFORM SERVICE AGREEMENTS.

**CITY OF GRAND RAPIDS, MICHIGAN
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
TASK NO. 25a**

REVIEW THE REVENUE REQUIREMENTS TO ASSURE COMPLIANCE WITH THE APPLICABLE BOND ORDINANCE PROVISIONS.

	YEAR ENDED 6/30/13	PRO FORMA *
REVENUES:		
RETAIL/WHOLESALE WATER SALES	\$ 41,220,464	\$ 38,046,945
CONNECTION FEES/FRONT FOOT FEES	950,335	850,000
BILLABLE TO SDS FUND	2,034,682	1,933,471
OTHER OPERATING REVENUES	2,057,503	2,247,000
INTEREST ON INVESTMENTS	192,493	110,000
MISCELLANEOUS	581,765	516,371
TOTAL REVENUES	<u>\$ 47,037,242</u>	<u>\$ 43,703,787</u>
OPERATING EXPENSES:		
OPERATIONS & MAINTENANCE	\$ 24,930,866	\$ 24,608,700
DEPRECIATION	7,732,587	7,732,587
TOTAL EXPENSES	<u>\$ 32,663,453</u>	<u>\$ 32,341,287</u>
ADDITIONS: DEPRECIATION	<u>7,732,587</u>	<u>7,732,587</u>
NET EARNINGS OF THE SYSTEM	<u><u>\$ 22,106,376</u></u>	<u><u>\$ 19,095,087</u></u>
DEBT SERVICE (CASH BASIS)		
SERIES 1993 BONDS	\$ 3,475,850	\$ 3,492,100
SERIES 2005 BONDS	2,270,938	2,274,738
SERIES 2009 BONDS	1,970,140	1,972,740
SERIES 2010 BONDS	7,352,900	7,336,700
SERIES 2013 BONDS	-	366,055
SENIOR LIEN	<u>15,069,828</u>	<u>15,442,333</u>
JUNIOR LIEN **	<u>134,625</u>	<u>534,775</u>
TOTAL	<u><u>15,204,453</u></u>	<u><u>15,977,108</u></u>
COVERAGE RATIO - SENIOR DEBT	<u>1.47</u>	<u>1.24</u>
COVERAGE RATIO - ALL DEBT	<u><u>1.45</u></u>	<u><u>1.20</u></u>

* METERED SALES ADJUSTED FOR RATE REVISIONS OF -4.41% AND -4.30% EFFECTIVE 1/1/13 AND 1/1/14, RESPECTIVELY; OTHER REVENUES AND OPERATIONS & MAINTENANCE EXPENSE PER 2014 FISCAL PLAN, ADJUSTED FOR CARRYFORWARDS.

** AMOUNTS IN PRO FORMA ARE BASED ON MAXIMUM PRINCIPAL AND DO NOT INCLUDE PRINCIPAL FORGIVENESS.

SUMMARY

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26**

INITIAL SYSTEM REVENUE REQUIREMENTS	\$ 38,814,891
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REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE	\$ 10,434,952	
MONTHLY BILLING CHARGE	3,094,254	
COMMODITY CHARGE	26,160,395	
MONTHLY FIRE PROTECTION	636,838	
ANNUAL HYDRANT CHARGE	55,704	(40,382,143)
INITIAL REQUIRED REVENUE INCREASE (DECREASE)		\$ (1,567,252)
INITIAL PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		-3.88%

INITIAL SYSTEM REVENUE REQUIREMENTS FROM ABOVE	\$ 38,814,891
LESS: AMOUNT OF CIRCUIT BREAKER RELIEF TO REDUCE RR's TO RETAIL	(168,143)
SYSTEM REVENUE REQUIREMENTS	\$ 38,646,748
ACTUAL REQUIRED AMOUNT OF REVENUE INCREASE (DECREASE)	\$ (1,735,395)
ACTUAL PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES	-4.30%

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
TASK NO. 26**

METER SIZE	EQUIV. FACTOR	CITY OF GR		CITY OF WALKER		CITY OF KENTWOOD		CASCADE TWP		GR TWP		TALLMADGE TWP	
		METERS	EQUIV.	METERS	EQUIV.	METERS	EQUIV.	METERS	EQUIV.	METERS	EQUIV.	METERS	EQUIV.
A 3/4" or less	1.0000	54,808	54,808	5,410	5,410	3,425	3,425	2,492	2,492	3,566	3,566	116	116
B 1"	1.7778	2,469	4,389	459	816	622	1,106	322	572	310	551	20	36
C 1 1/4"	2.7778	-	-	-	-	-	-	-	-	-	-	-	-
D 1 1/2"	4.0000	1,122	4,488	217	868	388	1,552	237	948	120	480	4	16
E 2"	7.1111	849	6,037	105	747	196	1,394	95	676	43	306	3	21
F 3"	16.0000	92	1,472	10	160	18	288	8	128	7	112	2	32
G 4"	28.4444	85	2,418	9	256	13	370	3	85	2	57	1	28
H 6" and over	64.0000	13	832	3	192	2	128	-	-	1	64	-	-
		<u>59,438</u>	<u>74,444</u>	<u>6,213</u>	<u>8,449</u>	<u>4,664</u>	<u>8,263</u>	<u>3,157</u>	<u>4,901</u>	<u>4,049</u>	<u>5,136</u>	<u>146</u>	<u>249</u>
FIRE PROTECTION SERVICE													
H 6"		945		218		288		133		93		14	
I 8"		270		74		199		108		23		1	
J 10"		15		6		10		2		-		-	
K 12"		21		17		23		20		1		2	
		<u>1,251</u>		<u>315</u>		<u>520</u>		<u>263</u>		<u>117</u>		<u>17</u>	
	TOTAL	<u>60,689</u>		<u>6,528</u>		<u>5,184</u>		<u>3,420</u>		<u>4,166</u>		<u>163</u>	
	TOTAL											<u>80,150</u>	

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Source: Water/Sewer Customer Accounts/Meters Report, dated October 31, 2013.

CITY OF GRAND RAPIDS, MICHIGAN**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26**

SYSTEM REVENUE REQUIREMENTS	\$ 22,974,830
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REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

74,444 meter equivalents	x	\$ 6.67	x	12 =	\$ 5,958,498
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MONTHLY BILLING CHARGE

59,438 meters	x	\$ 3.32	x	12 =	2,368,010
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COMMODITY CHARGE

8,653,272 units (100 CF)	x	\$ 1.77	=	15,316,291
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MONTHLY FIRE PROTECTION

297,590

ANNUAL HYDRANT CHARGE

-	(23,940,389)
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REQUIRED REVENUE INCREASE (DECREASE)

\$ (965,560)

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES

-4.03%

CITY OF GRAND RAPIDS, MICHIGAN

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

COMMODITY CHARGE:

$$\frac{\text{COMMODITY CHARGE @ 64\%}}{\text{BILLED UNITS}} = \frac{\$14,703,891}{8,653,272} = \$ 1.70 /100 \text{ CF} *$$

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS \$ 22,974,830

NEW COMMODITY CHARGE

8,653,272 x \$ 1.70 \$ 14,710,562

NEW MONTHLY BILLING CHARGE

59,438 x \$ 2.87 x 12 2,047,045

MONTHLY FIRE PROTECTION CHARGE

297,590

ANNUAL HYDRANT CHARGE

- (17,055,197)

\$ 5,919,632

$$\text{MONTHLY METER CHARGE} = \frac{\$5,919,632}{74,444 \times 12} = \$ 6.63 \text{ MONTHLY}$$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 6.63	\$ 2.87	\$ 9.50	\$ 9.99
1"	1.7778	11.79	2.87	14.66	15.18
1 1/4"	2.7778	18.42	2.87	21.29	21.85
1 1/2"	4.0000	26.52	2.87	29.39	30.00
2"	7.1111	47.15	2.87	50.02	50.75
3"	16.0000	106.08	2.87	108.95	110.04
4"	28.4444	188.59	2.87	191.46	193.04
6" and over	64.0000	424.32	2.87	427.19	430.20

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2014

CITY OF WALKER, MICHIGAN

WATER RATE STUDY
 WATER SUPPLY SYSTEM FUND
 RATE ANALYSIS - TASK NO. 26

SYSTEM REVENUE REQUIREMENTS * \$ 3,087,410

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

8,449 meter equivalents x \$ 9.22 x 12 = \$ 934,797

MONTHLY BILLING CHARGE

6,213 meters x \$ 3.32 x 12 = 247,526

COMMODITY CHARGE

1,194,098 units (100 CF) x \$ 1.63 = 1,946,380

MONTHLY FIRE PROTECTION

83,334

ANNUAL HYDRANT CHARGE

- (3,212,037)

REQUIRED REVENUE INCREASE (DECREASE)

\$ (124,627)

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES

-3.88%

* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 1,196

CITY OF WALKER, MICHIGAN

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 1.57 /100 CF *

\$ 1.63 x 96.12%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS ** \$ 3,087,410

NEW COMMODITY CHARGE

1,194,098 x \$ 1.57 \$ 1,874,734

NEW MONTHLY BILLING CHARGE

6,213 x \$ 2.87 x 12 213,976

MONTHLY FIRE PROTECTION CHARGE 83,334

ANNUAL HYDRANT CHARGE - (2,172,044)

\$ 915,366

MONTHLY METER CHARGE = $\frac{\$915,366}{8,449 \times 12}$ = \$ 9.03 MONTHLY

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 9.03	\$ 2.87	\$ 11.90	\$ 12.54
1"	1.7778	16.05	2.87	18.92	19.71
1 1/4"	2.7778	25.08	2.87	27.95	28.93
1 1/2"	4.0000	36.12	2.87	38.99	40.20
2"	7.1111	64.21	2.87	67.08	68.88
3"	16.0000	144.48	2.87	147.35	150.84
4"	28.4444	256.85	2.87	259.72	265.58
6" and over	64.0000	577.92	2.87	580.79	593.40

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2014

** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 1,196

CITY OF KENTWOOD, MICHIGAN**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26**

SYSTEM REVENUE REQUIREMENTS	\$ 4,065,885
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REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

8,263 meter equivalents	x	\$ 11.78	x	12 =	\$ 1,168,058
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MONTHLY BILLING CHARGE

4,664 meters	x	\$ 3.32	x	12 =	185,814
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COMMODITY CHARGE

1,745,663 units (100 CF)	x	\$ 1.60	=	2,793,061
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MONTHLY FIRE PROTECTION

146,117

ANNUAL HYDRANT CHARGE

-	(4,293,050)
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REQUIRED REVENUE INCREASE (DECREASE)

\$ (227,165)

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES

-5.29%

CITY OF KENTWOOD, MICHIGAN

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

COMMODITY CHARGE:

PRESENT CHARGE	x	RATE ADJUSTMENT		\$ 1.52 /100 CF *
\$ 1.60	x	94.71%		

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS	\$ 4,065,885
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NEW COMMODITY CHARGE				
1,745,663	x	\$ 1.52		\$ 2,653.408

NEW MONTHLY BILLING CHARGE

4,664	x	\$	2.87	x	12	160,628
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MONTHLY FIRE PROTECTION CHARGE	146,117
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ANNUAL HYDRANT CHARGE	-	(2,960,153)
		<u>\$ 1,105,732</u>

$$\text{MONTHLY METER CHARGE} = \frac{\$1,105,732}{8,263 \times 12} = \$ 11.15 \text{ MONTHLY}$$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 11.15	\$ 2.87	\$ 14.02	\$ 15.10
1"	1.7778	19.82	2.87	22.69	24.26
1 1/4"	2.7778	30.97	2.87	33.84	36.04
1 1/2"	4.0000	44.60	2.87	47.47	50.44
2"	7.1111	79.29	2.87	82.16	87.09
3"	16.0000	178.40	2.87	181.27	191.80
4"	28.4444	317.16	2.87	320.03	338.40
6" and over	64.0000	713.60	2.87	716.47	757.24

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2014

CASCADE TOWNSHIP
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

SYSTEM REVENUE REQUIREMENTS * \$ 2,945,147

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

4,901 meter equivalents x \$ 17.06 x 12 = \$ 1,003,333

MONTHLY BILLING CHARGE

3,157 meters x \$ 3.32 x 12 = 125,775

COMMODITY CHARGE

841,275 units (100 CF) x \$ 2.16 = 1,817,154

MONTHLY FIRE PROTECTION

78,770

ANNUAL HYDRANT CHARGE

39,000

(3,064,032)

REQUIRED REVENUE INCREASE (DECREASE)

\$ (118,885)

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES

-3.88%

* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 150,424

CASCADE TOWNSHIP

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 2.08 /100 CF *

\$ 2.16 x 96.12%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS ** \$ 2,945,147

NEW COMMODITY CHARGE
841,275 x \$ 2.08 \$ 1,749,852

NEW MONTHLY BILLING CHARGE
3,157 x \$ 2.87 x 12 108,727

MONTHLY FIRE PROTECTION CHARGE 78,770

ANNUAL HYDRANT CHARGE 39,000 (1,976,349)

\$ 968,798

MONTHLY METER CHARGE = $\frac{\$968,798}{4,901 \times 12} = \underline{\underline{\$ 16.47 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 16.47	\$ 2.87	\$ 19.34	\$ 20.38
1"	1.7778	29.28	2.87	32.15	33.65
1 1/4"	2.7778	45.75	2.87	48.62	50.71
1 1/2"	4.0000	65.88	2.87	68.75	71.56
2"	7.1111	117.12	2.87	119.99	124.64
3"	16.0000	263.52	2.87	266.39	276.28
4"	28.4444	468.48	2.87	471.35	488.58
6" and over	64.0000	1,054.08	2.87	1,056.95	1,095.16

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2014

** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 150,424

GRAND RAPIDS TOWNSHIP
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

SYSTEM REVENUE REQUIREMENTS						\$ 2,077,895
REVENUES FROM CURRENT RATES						
MONTHLY METER CHARGE						
5,136 meter equivalents	x	\$ 12.18	x	12 =	\$	750,678
MONTHLY BILLING CHARGE						
4,049 meters	x	\$ 3.32	x	12 =		161,312
COMMODITY CHARGE						
690,289 units (100 CF)	x	\$ 1.79		=		1,235,617
MONTHLY FIRE PROTECTION						26,462
ANNUAL HYDRANT CHARGE					-	(2,174,069)
REQUIRED REVENUE INCREASE (DECREASE)						<u>\$ (96,174)</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES						<u>-4.42%</u>

GRAND RAPIDS TOWNSHIP**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 1.71 /100 CF *
 \$ 1.79 x 95.58%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS \$ 2,077,895

NEW COMMODITY CHARGE
 690,289 x \$ 1.71 \$ 1,180,394

NEW MONTHLY BILLING CHARGE
 4,049 x \$ 2.87 x 12 139,448

MONTHLY FIRE PROTECTION CHARGE 26,462

ANNUAL HYDRANT CHARGE - (1,346,304)
\$ 731,591

MONTHLY METER CHARGE = $\frac{\$731,591}{5,136 \times 12}$ = \$ 11.87 MONTHLY

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 11.87	\$ 2.87	\$ 14.74	\$ 15.50
1"	1.7778	21.10	2.87	23.97	24.97
1 1/4"	2.7778	32.97	2.87	35.84	37.15
1 1/2"	4.0000	47.48	2.87	50.35	52.04
2"	7.1111	84.41	2.87	87.28	89.93
3"	16.0000	189.92	2.87	192.79	198.20
4"	28.4444	337.64	2.87	340.51	349.77
6" and over	64.0000	759.68	2.87	762.55	782.84

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2014

TALLMADGE TOWNSHIP
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

SYSTEM REVENUE REQUIREMENTS *	\$	125,228
LESS: CASH CONTRIBUTION		-
SYSTEM REVENUE REQUIREMENTS	\$	<u>125,228</u>

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE					
249 meter equivalents	x	\$ 4.17	x	12 =	\$ 12,460
MONTHLY BILLING CHARGE					
146 meters	x	\$ 3.32	x	12 =	5,817
COMMODITY CHARGE					
24,724 units (100 CF)	x	\$ 3.67	=		90,737
MONTHLY FIRE PROTECTION					4,565
ANNUAL HYDRANT CHARGE					<u>16,704</u>
REQUIRED REVENUE INCREASE (DECREASE)					<u>(130,283)</u>
					<u>\$ (5,055)</u>

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES	<u>-3.88%</u>
--	---------------

* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 16,523

TALLMADGE TOWNSHIP

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 3.53 /100 CF *
 \$ 3.67 x 96.12%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS ** \$ 125,228

NEW COMMODITY CHARGE
 24,724 x \$ 3.53 \$ 87,276

NEW MONTHLY BILLING CHARGE
 146 x \$ 2.87 x 12 5,028

MONTHLY FIRE PROTECTION CHARGE 4,565

ANNUAL HYDRANT CHARGE 16,704 (113,573)
\$ 11,655

MONTHLY METER CHARGE = $\frac{\$11,655}{249 \times 12}$ = \$ 3.90 MONTHLY

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 3.90	\$ 2.87	\$ 6.77	\$ 7.49
1"	1.7778	6.93	2.87	9.80	10.73
1 1/4"	2.7778	10.83	2.87	13.70	14.90
1 1/2"	4.0000	15.60	2.87	18.47	20.00
2"	7.1111	27.73	2.87	30.60	32.97
3"	16.0000	62.40	2.87	65.27	70.04
4"	28.4444	110.93	2.87	113.80	121.93
6" and over	64.0000	249.60	2.87	252.47	270.20

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2014

** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 16,523

CITY OF EAST GRAND RAPIDS, MICHIGAN

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26**

INTEGRATED SYSTEM REVENUE REQUIREMENTS *	\$ 679,587
COMMODITY CHARGE	
(100CF) 608,588 units x \$ 1.18	718,134
	<hr/>
REQUIRED COMMODITY REVENUE INCREASE (DECREASE)	<u>\$ (38,547)</u>
NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS	\$ 171,118
MONTHLY SERVICE CHARGE	
\$15,702 x 12 MONTHS	188,424
	<hr/>
REQUIRED SERVICE REVENUE INCREASE (DECREASE)	<u>\$ (17,306)</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES	<u>-6.16%</u>

* NET OF INTEGRATED CONNECTION FEE CREDIT.

CITY OF EAST GRAND RAPIDS, MICHIGAN

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

SYSTEM REVENUE REQUIREMENTS	\$ 850,705
NEW COMMODITY CHARGE *	
608,588 x \$1.12 =	(681,619)
	<hr/>
	<u>\$ 169,086</u>

MONTHLY SERVICE CHARGE * = \$ 169,086 / 12 = \$14,091

* NEW RATES EFFECTIVE ON JANUARY 1, 2014

ADA TOWNSHIP
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

INTEGRATED SYSTEM REVENUE REQUIREMENTS *	\$	813,568
COMMODITY CHARGE		
(100CF) 652,197 units x \$ 1.30		847,856
		<hr/>
REQUIRED COMMODITY REVENUE INCREASE (DECREASE)	\$	<u><u>(34,288)</u></u>
NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS	\$	358,389
MONTHLY SERVICE CHARGE		
\$34,722 x 12 MONTHS		416,664
		<hr/>
REQUIRED SERVICE REVENUE INCREASE (DECREASE)	\$	<u><u>(58,275)</u></u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		<u><u>-7.32%</u></u>

* NET OF INTEGRATED CONNECTION FEE CREDIT.

ADA TOWNSHIP

**WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

SYSTEM REVENUE REQUIREMENTS	\$ 1,171,957
NEW COMMODITY CHARGE *	
652,197 x \$1.25 =	(815,246)
	<hr/>
	<u>\$ 356,711</u>

MONTHLY SERVICE CHARGE * = \$356,711 / 12 = \$29,726

* NEW RATES EFFECTIVE ON JANUARY 1, 2014

OTTAWA COUNTY
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

INTEGRATED SYSTEM REVENUE REQUIREMENTS	\$ 1,347,691
COMMODITY CHARGE	
(100CF) 1,107,274 units x \$ 1.26	1,395,165
	<hr/>
REQUIRED COMMODITY REVENUE INCREASE (DECREASE)	<u>\$ (47,474)</u>
NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS	\$ -
MONTHLY SERVICE CHARGE	
\$170 x 12 MONTHS	2,040
	<hr/>
REQUIRED SERVICE REVENUE INCREASE (DECREASE)	<u>\$ (2,040)</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES	<u>-3.54%</u>

OTTAWA COUNTY
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

SYSTEM REVENUE REQUIREMENTS	\$ 1,347,691
NEW COMMODITY CHARGE *	
1,107,274 x \$1.22 =	(1,350,874)
	<hr/>
	<u>\$ (3,183)</u>

MONTHLY SERVICE CHARGE * = \$ - / 12 = \$0

* NEW RATES EFFECTIVE ON JANUARY 1, 2014

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 7, 2013

TO: Geri Eye
Utility Financial Officer

FROM: Rick DeVries, P.E.
Assistant City Engineer

SUBJECT: **WATER RATE STUDY - TASK NO. 28 AND 29**

Enclosed are the Front Foot Rates for Watermain (Task 28) and the costs for the Water Service Pipes (Task 29), for the Fiscal Year 2013.

RDV

Enclosures

cc: Jack Stegehuis
Mark Garvey

WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
RE-EVALUATE FRONT FOOT CHARGES
TASK NO. 28

The City Engineer's Office has reviewed current construction costs for water facilities and recommends the following front foot assessment rates:

	<u>2013</u>	<u>2014</u>	<u>% Increase</u>
Domestic Water User	\$ 75.00	\$ 78.00	4.00%
Commercial - Industrial User (Watermain over 8 in. diameter)	\$110.00	\$ 103.00	-6.36%

The rates are based on an average of prices quoted in bid proposals which have been received by the City Engineer's Office during the period July, 2012 through June, 2013. Calculations of the rates are on file in the City Engineer's Office.

WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
EVALUATE WATER SERVICE CHARGES
TASK NO. 29

The City Engineer's Office has evaluated the cost for water services and recommends the following water service charges:

		<u>50 Ft. R.O.W.</u>	<u>60 Ft. R.O.W.</u>	<u>66 Ft. R.O.W.</u>	<u>80 Ft. R.O.W.</u>	<u>100 Ft. R.O.W.</u>
Cost for 1"	2013	\$ 2,050	\$ 2,400	\$ 2,550	\$ 3,000	\$ 3,600
Water Service	2014	\$ 2,250	\$ 2,600	\$ 2,800	\$ 3,200	\$ 3,900
Cost for 1-1/2"	2013	\$ 3,000	\$ 3,400	\$ 3,700	\$ 4,200	\$ 5,000
Water Service	2014	\$ 3,100	\$ 3,500	\$ 3,750	\$ 4,400	\$ 5,200
Cost for 2"	2013	\$ 3,500	\$ 3,900	\$ 4,200	\$ 4,750	\$ 5,600
Water Service	2014	\$ 3,550	\$ 3,900	\$ 4,300	\$ 4,800	\$ 5,800

The percent increases of the water service pipe charges are as shown below:

	<u>50 Ft. R.O.W.</u>	<u>60 Ft. R.O.W.</u>	<u>66 Ft. R.O.W.</u>	<u>80 Ft. R.O.W.</u>	<u>100 Ft. R.O.W.</u>
Increase for 1"	9.76%	8.33%	9.80%	6.67%	8.33%
Water Service					
Increase for 1-1/2"	3.33%	2.94%	1.35%	4.76%	4.00%
Water Service					
Increase for 2"	1.43%	0.00%	2.38%	1.05%	3.57%
Water Service					

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 7, 2013

TO: Geri D. Eye
Utility Financial Officer

FROM: Nicole N. Pasch, Business Manager

SUBJECT: 2013 Water Rate Study - Task #30

Miscellaneous rates and charges contained within the Water System Rules and Regulations have been reviewed with staff.

The following are recommended changes:

- Fees for Omni type meters (1-1/2", 2", 3", 4" and 6" or larger) were added to Frozen/Damaged/Missing Meter Charges
- Wording was changed from "Final Reading" to "Final or Actual Reading" under Meter Fees
- Security Deposit information was updated to FY13 figures
- Wording of "(Administration Fee)" was added to Processing for shut-off under Penalties
- Wording at conclusion of Penalties was changed to "*Penalties shall double with each subsequent infraction"

All other fees and charges are recommended to remain the same.

NNP

Cc: Joellen Thompson
Wayne Jernberg
Pamela Ritsema
Mike Lunn

TASK 30
Fees, Charges, and Penalties

Fire Protection Charges

<u>Pipe Size</u>	<u>Monthly (\$)</u>	<u>Quarterly (\$)</u>
6"	16.00	48.00
8"	28.40	85.20
10"	44.48	133.44
12"	64.00	192.00

Hydrant Use Permits

	<u>Deposit (\$)</u>	<u>Fee (\$)</u>
Weekly Pool Filling Permit.....	300.00 (Refundable)	75.00/week
Contractor Seasonal Hydrant Connection Permit.....	300.00 (Non-refundable)	75.00/week
(Winter or Summer)		
Tanker Hydrant Connection Permit.....	300.00 (Non-refundable)	25.00/week*
	*Plus metered volume-based on average retail commodity rates	
Hydrant Flow Test Fee.....		200.00

Tapping Permits

<u>Connection Size</u>	<u>Fee (\$)</u>
2" or smaller.....	225.00
3" or Larger.....	Cost

Meter Installation and Seasonal Turn off/on Fees

<u>Meter Size (Inches)</u>	<u>Fee (\$)</u>
3/4" or smaller.....	40.00
1"	45.00
1-1/2"	55.00
2"	60.00
3"	100.00
4"	200.00
6" or larger.....	250.00

Frozen/Damaged/Missing Meter Charges

<u>Meter Size (Inches)</u>	<u>Fee (\$)</u>
3/4" or smaller.....	150.00
1"	200.00
1-1/2" ECR.....	350.00
1-1/2" Turbo	500.00
1-1/2" Omni	820.00
2" ECR	450.00
2" Turbo	575.00
2" Omni	950.00
3" Turbo.....	750.00
3" Omni	1170.00

4" Omni	2205.00
6" or larger	3530.00

Meter Fees

	<u>Fee (\$)</u>
Final or Actual Reading.....	35.00
Meter Testing Fee: (paid by customer if meter is accurate, no charge if meter is faulty)	
5/8 – 1" Meter.....	50.00
1-1/2- 2" Meter.....	75.00
3-6" Meter.....	Cost

Water and Sewer Rates

Chapter 26 and 27, Grand Rapids City Code

Security Deposit

	<u>Minimum Charge(\$)</u>
Three (3) times the average quarterly bill (\$181.44).....	544.32

Miscellaneous Fees and Permits

	<u>Fee (\$)</u>
Street Opening Permit.....	30.00
Water Inspection Permit (each inspection within the City)	40.00
Water Inspection Permit (each inspection outside of the City)	55.00
Sanitary Service Line Inspection Permit (each inspection within the City)	40.00
Sanitary Service Line Inspection Permit (each inspection outside of the City)	55.00
Storm Service Line Inspection Permit (each inspection within the City)	40.00
Storm Service Line Inspection Permit (each inspection outside of the City)	55.00
Plumbing Service Re-inspection Fee	40.00
Cross Connection Re-inspection Fee	75.00
Sewer Lateral Service Demolition/Cap off Inspection Fee (each within the City)	40.00
Sewer Lateral Service Demolition/Cap off Inspection Fee (each out of the City)	55.00
Footing Drain Lateral Inspection Permit (each within the City)	40.00
Footing Drain Lateral Inspection Permit (each out of the City)	55.00

Service Fee

	<u>Fee (\$)</u>
Customer-requested on-site service (non-scheduled appointment-customer issue only)	55.00
Turn-on/turn-off water for real-estate inspections.....	110.00

Penalties

	<u>Fee(\$)</u>
Late-Payment Penalty	10% of net
Processing for shut-off (Administration Fee) (non-payment, cross connection)	55.00

Penalty for failure to keep appointment	35.00
Penalty for each missed appointment thereafter (related to same service)	50.00
Unauthorized operation of valves (plus double the commodity rate for estimated volume)	100.00*
Unauthorized use of connection pipes for fire protection (plus double the commodity rate for estimated volume)	100.00*
Unauthorized opening of by-pass valve/tampering (plus double the commodity rate for estimated volume)	100.00*
Unauthorized use of a hydrant	500.00
Use of illegal connection on hydrant (including loss of connection)	500.00
Failure to return hydrant connection equipment and/or return of damaged hydrant connection equipment	500.00
Lost/non-returned hydrant wrench	50.00
Permit infractions/violations (plus double with each subsequent infraction)	100.00*
Returned check charge (verified with City Treasurer)	30.00
Unauthorized service tap of water main (fine per tap plus tapping permit fee for each tap)	500.00

***Penalties shall double with each subsequent infraction**

**CITY OF GRAND RAPIDS, MICHIGAN
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
TASK NO. 31**

THERE IS NO TASK 31 FOR THE WATER RATE STUDY.

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 11, 2013

TO: Geri Eye
Utility Finance Officer

FROM: Wayne Jernberg, P.E.
Assistant Water System Manager

SUBJECT: **2013 WATER RATE STUDY- TASK #32, WATER MAIN OVERSIZING RATES**

Water main oversizing rates are established for this year as noted below:

8 inch to 12 inch	\$16.56 per lineal foot
12 inch to 16 inch	\$21.78 per lineal foot
8 inch to 16 inch	\$38.35 per lineal foot

These rates have been determined in accordance with the Water System Rules and Regulations, and are approved for use from January 1, 2014 through December 31, 2014. Background information and calculations to establish these rates are on file in the Utility Engineering, Distribution and Collection Office.

These costs will be reviewed and may be adjusted again next year. If you have any questions regarding this matter, please call me at 456-4055.

WJ

Cc: Joellen Thompson
Arden Postma
Rick DeVries
Mark DeClercq

**CITY OF GRAND RAPIDS, MICHIGAN
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
TASK NO. 33**

SERVICE AREA MAPS AND SERVICE AREA LAND MASS SUMMARIES

The following summarizes Utility Services Districts (USD) land mass square miles for UAB partner communities, per information on file as of October 7, 2013:

UAB Partners	Sq. Miles of USD by CC	Percent
Grand Rapids	45.36	35.127%
Walker	25.43	19.693%
Kentwood	14.00	10.842%
Cascade	20.45	15.837%
Grand Rapids Township	10.93	8.464%
Tallmadge Township	2.44	1.890%
East Grand Rapids	3.37	2.610%
Ada	7.15	5.537%
Total	129.13	100.000%

**CITY OF GRAND RAPIDS, MICHIGAN
WATER RATE STUDY
WATER SUPPLY SYSTEM FUND
TASK NO. 34**

INDIVIDUAL CIRCUIT BREAKER AND CITY & CUSTOMER COMMUNITY CIRCUIT BREAKER

The Third Amendment to the Water and Sanitary Sewer Agreements stipulates penalty fees shall be used to fund the circuit breaker provisions noted above. The following summarizes those values:

Description	AMOUNT	PERCENT
Individual Circuit Breaker	\$ 68,139	12.50%
City & Customer Community Circuit Breaker	476,974	87.50%
Total	<u>\$ 545,113</u>	<u>100.00%</u>

The following summarizes the amount, if any, of the City & Customer Community Circuit Breaker to be applied as a revenue credit in next year's Rate Study:

Description	AMOUNT	PERCENT
City & Customer Community Circuit Breaker Amount- Above	\$ 476,974	100.00%
Less: Amount Applied in Current Rate Study	(168,143)	-35.25%
Total Revenue Credit- Next Year's Rate Study	<u>\$ 308,831</u>	<u>64.75%</u>

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
SYSTEM ADDITIONS AND IMPROVEMENTS
FOR THE YEAR ENDED JUNE 30, 2013
TASKS NO. 1, 2, & 3**

COMMUNITY	LOCAL		TRUNK		INTERCEPTOR		TOTALS	
	FEET	MILES	FEET	MILES	FEET	MILES	FEET	MILES
Grand Rapids								
Construction	2,286	0.43	4,942	0.94	0	0.00	7,228	1.37
Abandonment	(1,974)	(0.37)	(3,584)	(0.68)	0	0.00	(5,558)	(1.05)
CSO Construction	2,320	0.44	3,315	0.63	3,134	0.59	8,769	1.66
CSO Abandonment	(3,467)	(0.66)	(1,745)	(0.33)	(3,107)	(0.59)	(8,319)	(1.58)
	(835)	(0.16)	2,928	0.56	27	0.00	2,120	0.40
Kentwood								
Construction	0	0.00	0	0.00	0	0.00	0	0.00
Abandonment	0	0.00	0	0.00	0	0.00	0	0.00
	0	0.00	0	0.00	0	0.00	0	0.00
Cascade Twp.								
Construction	0	0.00	0	0.00	0	0.00	0	0.00
Abandonment	0	0.00	0	0.00	0	0.00	0	0.00
	0	0.00	0	0.00	0	0.00	0	0.00
G.R. Twp.								
Construction	5,760	1.09	0	0.00	0	0.00	5,760	1.09
Abandonment	0	0.00	0	0.00	0	0.00	0	0.00
	5,760	1.09	0	0.00	0	0.00	5,760	1.09
Tallmadge Twp.								
Construction	0	0.00	0	0.00	0	0.00	0	0.00
Abandonment	0	0.00	0	0.00	0	0.00	0	0.00
	0	0.00	0	0.00	0	0.00	0	0.00
Walker								
Construction	0	0.00	0	0.00	0	0.00	0	0.00
Abandonment	0	0.00	0	0.00	0	0.00	0	0.00
	0	0.00	0	0.00	0	0.00	0	0.00
Wright Twp								
Construction	0	0.00	0	0.00	0	0.00	0	0.00
Abandonment	0	0.00	0	0.00	0	0.00	0	0.00
	0	0.00	0	0.00	0	0.00	0	0.00
TOTAL	4,925	0.93	2,928	0.56	27	-	7,880	1.49

	CONTRIBUTIONS		
	COMM	OTHER	TOTAL
Integrated	\$ -	\$ 38,186	\$ 38,186
Grand Rapids	196,746	970,000	1,166,746
Kentwood	294,007		294,007
Cascade Twp.	-		-
Grand Rapids Twp.	429,710		429,710
Tallmadge Twp.	-		-
Walker	-		-
Wright Twp.	-		-
TOTAL	\$ 920,463	\$ 1,008,186	\$ 1,928,649

CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
OPERATING EXPENSE ALLOCATION BY COST CENTER - TASK #4, PART 1
FISCAL YEAR ENDED JUNE 30, 2013

ACTIVITY CODE	ACTIVITY	EXPENSE BY ACTIVITY	WASTEWATER TREATMENT PLANT	WASTEWATER LIFT STATIONS			SEWER LINES			BULK METERING STATIONS	CUSTOMER ACCOUNTING	INDUSTRIAL PRETREAT.	ADMIN. EXPENSE
				INTERCEPTOR	TRUNK	LOCAL COLLECTOR	INTERCEPTOR	TRUNK	LOCAL COLLECTOR				
4423	WASTEWATER TREATMENT (LESS 442305)	\$ 16,024,125	\$ 15,184,767	\$ 275,265	\$ 120,607	\$ 432,141				\$ 11,346			
4425	SEWER MAINTENANCE	5,021,812					267,914	572,939	4,180,959				
4413	CUSTOMER SERVICE *	2,679,512									2,679,512		
442305	INDUSTRIAL PRETREATMENT	639,323										639,323	
	SUBTOTAL OPERATING EXPENSE	24,364,772	15,184,767	275,265	120,607	432,141	267,914	572,939	4,180,959	11,346	2,679,512	639,323	-
4410	ADMINISTRATION	1,064,087											1,064,087
	TOTAL	\$ 25,428,859	\$ 15,184,767	\$ 275,265	\$ 120,607	\$ 432,141	\$ 267,914	\$ 572,939	\$ 4,180,959	\$ 11,346	\$ 2,679,512	\$ 639,323	\$ 1,064,087

* Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

METHOD OF DISTRIBUTION

4423	WASTEWATER TREATMENT		100.000%										
	A. TREATMENT PLANT			94.762%									
	B. LIFT & METER STATIONS			5.238%									
	NO. OF STATIONS	(57)			(1)	(7)	(45)			(4)			
4425	SEWER MAINTENANCE												
	TOTAL MILES	906.63	100.000%										
	A. INTERCEPTOR												
	MILES	48.37	5.335%				5.335%						
	B. TRUNK LINES												
	MILES	103.44	11.409%					11.409%					
	C. LOCAL COLLECTOR												
	MILES	754.82	83.256%						83.256%				
4413	CUSTOMER SERVICE		100.000%								100.000%		
442305	INDUSTRIAL PRETREATMENT		100.000%									100.000%	
4410	ADMINISTRATION		100.000%										100.000%

CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
OPERATING EXPENSE ALLOCATION BY GOVERNMENTAL UNIT - TASK #4, PART 2
FISCAL YEAR ENDED JUNE 30, 2013

COST CENTER	EXPENSE BY COST CENTER	INTEGRATED SYSTEM	RETAIL							WHOLESALE				
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR	N. KENT AREA	ADA TOWNSHIP	GAINES TOWNSHIP	MEIJER- ALGOMA
WASTEWATER TREATMENT	\$ 15,184,767	\$ 15,184,767												
LIFT STATIONS:														
A. INTERCEPTOR	275,265		275,265	-	-	-	-	-	-	-	-	-	-	-
B. TRUNK	120,607		32,020	69,698	-	18,889	-	-	-	-	-	-	-	-
C. LOCAL COLLECTOR	432,141		60,907	74,719	-	85,368	161,239	28,904	6,848	-	-	14,154	-	-
SEWER LINES:														
A. INTERCEPTOR	267,914		160,127	38,274	62,644	6,869	-	-	-	-	-	-	-	-
B. TRUNK	572,939		194,804	147,830	134,652	48,574	30,738	15,676	665	-	-	-	-	-
C. LOCAL COLLECTOR	4,180,959		2,620,415	515,679	407,727	247,764	318,046	46,409	24,919	-	-	-	-	-
BULK METERING STATIONS	11,346		-	-	3,428	-	-	-	-	2,804	-	2,581	2,533	-
CUSTOMER ACCOUNTING	2,679,512		2,108,213	201,044	161,441	64,094	131,430	4,957	8,333					
INDUSTRIAL PRETREATMENT	639,323	639,323												
SUBTOTAL OPERATING EXPENSE	24,364,772	15,824,090	5,451,751	1,047,244	769,892	471,558	641,453	95,946	40,765	2,804	-	16,735	2,533	-
ADMINISTRATIVE EXPENSE	1,064,087	691,090	238,095	45,736	33,624	20,594	28,014	4,190	1,780	122	-	731	111	-
TOTAL	<u>\$ 25,428,859</u>	<u>\$ 16,515,180</u>	<u>\$ 5,689,846</u>	<u>\$ 1,092,980</u>	<u>\$ 803,516</u>	<u>\$ 492,152</u>	<u>\$ 669,467</u>	<u>\$ 100,136</u>	<u>\$ 42,545</u>	<u>\$ 2,926</u>	<u>\$ -</u>	<u>\$ 17,466</u>	<u>\$ 2,644</u>	<u>\$ -</u>

ERR

METHOD OF DISTRIBUTION

WASTEWATER TREATMENT														
A. TREATMENT PLANT	100.000%	100.00%												
B. LIFT & METER STATIONS (1) NO. OF STATIONS (57)	100.000%		(13)	(6)	(1)	(10)	(17)	(5)	(1)	(1)	-	(2)	(1)	-
SEWER LINES:														
TOTAL MILES: 906.63														
A. INTERCEPTOR MILES 48.37	100.000%		59.768%	14.286%	23.382%	2.564%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
B. TRUNK LINES MILES 103.44	100.000%		34.001%	25.802%	23.502%	8.478%	5.365%	2.736%	0.116%	0.000%	0.000%	0.000%	0.000%	0.000%
C. LOCAL COLLECTOR MILES 754.82	100.000%		62.675%	12.334%	9.752%	5.926%	7.607%	1.110%	0.596%	0.000%	0.000%	0.000%	0.000%	0.000%
CUSTOMER ACCTG (2) NO. OF METERS 74,053.00	100.000%		78.990%	7.503%	6.025%	2.392%	4.905%	0.185%	0.311%					
INDUSTRIAL PRETREATMENT	100.000%	100.00%												
ADMINISTRATIVE EXPENSE (3)	100.000%	64.947%	22.376%	4.298%	3.160%	1.935%	2.633%	0.394%	0.167%	0.011%	0.000%	0.069%	0.010%	0.000%

NOTES:

(1) DIRECT COSTS PER SCHEDULE

(2) ALLOCATION BASED ON NUMBER OF METERS, INCLUSIVE OF USERS FOR WRIGHT TWP.

(3) ALLOCATED ON DIRECT OPERATING EXPENSE, ADJUSTED FOR ANY COST ASSIGNABLE EXCLUSIVELY TO GR OR RETAIL COMMUNITIES, IF APPLICABLE.

CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED OPERATING EXPENSE ALLOCATION BY COST CENTER - TASK #5, PART 1
FISCAL YEAR ENDED JUNE 30, 2013

ACTIVITY CODE	ACTIVITY	ADJUSTED EXPENSE BY ACTIVITY	WASTEWATER TREATMENT PLANT	WASTEWATER LIFT STATIONS			SEWER LINES			BULK METERING STATIONS	CUSTOMER ACCOUNTING	INDUSTRIAL PRETREAT.	ADMIN. EXPENSE
				INTERCEPTOR	TRUNK	LOCAL COLLECTOR	INTERCEPTOR	TRUNK	LOCAL COLLECTOR				
4423	WASTEWATER TREATMENT (LESS 442305)	\$ 14,714,535	\$ 13,924,033	\$ 259,244	\$ 113,588	\$ 406,985				\$ 10,685			
4425	SEWER MAINTENANCE	5,185,359					276,639	591,598	4,317,122				
4413	CUSTOMER SERVICE *	2,559,086									2,559,086		
442305	INDUSTRIAL PRETREATMENT	643,490										643,490	
	SUBTOTAL OPERATING EXPENSE	23,102,470	13,924,033	259,244	113,588	406,985	276,639	591,598	4,317,122	10,685	2,559,086	643,490	-
4410	ADMINISTRATION	1,624,251											1,624,251
	TOTAL	\$ 24,726,721	\$ 13,924,033	\$ 259,244	\$ 113,588	\$ 406,985	\$ 276,639	\$ 591,598	\$ 4,317,122	\$ 10,685	\$ 2,559,086	\$ 643,490	\$ 1,624,251

* Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

METHOD OF DISTRIBUTION

4423	WASTEWATER TREATMENT		100.000%										
	A. TREATMENT PLANT			94.628%									
	B. LIFT & METER STATIONS			5.372%									
	NO. OF STATIONS	(57)			(1)	(7)	(45)			(4)			
4425	SEWER MAINTENANCE												
	TOTAL MILES	906.63	100.000%										
	A. INTERCEPTOR												
	MILES	48.37	5.335%				5.335%						
	B. TRUNK LINES												
	MILES	103.44	11.409%					11.409%					
	C. LOCAL COLLECTOR												
	MILES	754.82	83.256%						83.256%				
4413	CUSTOMER SERVICE		100.000%								100.000%		
442305	INDUSTRIAL PRETREATMENT		100.000%									100.000%	
4410	ADMINISTRATION		100.000%										100.000%

CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED OPERATING EXPENSE ALLOCATION BY GOVERNMENTAL UNIT - TASK #5, PART 2
FISCAL YEAR ENDED JUNE 30, 2013

COST CENTER	ADJUSTED EXPENSE BY COST CENTER	INTEGRATED SYSTEM	RETAIL							WHOLESALE				
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR	N. KENT AREA	ADA TOWNSHIP	GAINES TOWNSHIP	MEIJER- ALGOMA
WASTEWATER TREATMENT	\$ 13,924,033	\$ 13,924,033												
LIFT STATIONS:														
A. INTERCEPTOR	259,244		259,244	-	-	-	-	-	-	-	-	-	-	-
B. TRUNK	113,588		30,157	65,641	-	17,790	-	-	-	-	-	-	-	-
C. LOCAL COLLECTOR	406,985		57,360	70,371	-	80,400	151,852	27,222	6,450	-	-	13,330	-	-
SEWER LINES:														
A. INTERCEPTOR	276,639		165,341	39,521	64,684	7,093	-	-	-	-	-	-	-	-
B. TRUNK	591,598		201,150	152,644	139,037	50,156	31,739	16,186	686	-	-	-	-	-
C. LOCAL COLLECTOR	4,317,122		2,705,756	532,474	421,006	255,833	328,403	47,920	25,730	-	-	-	-	-
BULK METERING STATIONS	10,685		-	-	3,228	-	-	-	-	2,641	-	2,431	2,385	-
CUSTOMER ACCOUNTING	2,559,086		2,013,464	192,008	154,185	61,213	125,523	4,734	7,959					
INDUSTRIAL PRETREATMENT	643,490	643,490												
SUBTOTAL OPERATING EXPENSE	23,102,470	14,567,523	5,432,472	1,052,659	782,140	472,485	637,517	96,062	40,825	2,641	-	15,761	2,385	-
ADMINISTRATIVE EXPENSE	1,624,251	1,024,188	381,937	74,009	54,990	33,219	44,822	6,754	2,870	186	-	1,108	168	-
TOTAL	<u>\$ 24,726,721</u>	<u>\$ 15,591,711</u>	<u>\$ 5,814,409</u>	<u>\$ 1,126,668</u>	<u>\$ 837,130</u>	<u>\$ 505,704</u>	<u>\$ 682,339</u>	<u>\$ 102,816</u>	<u>\$ 43,695</u>	<u>\$ 2,827</u>	<u>\$ -</u>	<u>\$ 16,869</u>	<u>\$ 2,553</u>	<u>\$ -</u>

METHOD OF DISTRIBUTION

WASTEWATER TREATMENT														
A. TREATMENT PLANT	100.000%	100.00%												
B. LIFT & METER STATIONS (1) NO. OF STATIONS (57)	100.000%		(13)	(6)	(1)	(10)	(17)	(5)	(1)	(1)	-	(2)	(1)	-
SEWER LINES:														
TOTAL MILES: 906.63														
A. INTERCEPTOR MILES 48.37	100.000%		59.768%	14.286%	23.382%	2.564%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
B. TRUNK LINES MILES 103.44	100.000%		34.001%	25.802%	23.502%	8.478%	5.365%	2.736%	0.116%	0.000%	0.000%	0.000%	0.000%	0.000%
C. LOCAL COLLECTOR MILES 754.82	100.000%		62.675%	12.334%	9.752%	5.926%	7.607%	1.110%	0.596%	0.000%	0.000%	0.000%	0.000%	0.000%
CUSTOMER ACCTG (2) NO. OF METERS 74,053.00	100.000%		78.679%	7.503%	6.025%	2.392%	4.905%	0.185%	0.311%					
INDUSTRIAL PRETREATMENT	100.000%	100.00%												
ADMINISTRATIVE EXPENSE (3)	100.000%	63.055%	23.515%	4.557%	3.386%	2.045%	2.760%	0.416%	0.177%	0.011%	0.000%	0.068%	0.010%	0.000%

NOTES:

(1) ADJUSTED DIRECT COSTS PER SCHEDULE

(2) ALLOCATION BASED ON NUMBER OF METERS, INCLUSIVE OF USERS FOR WRIGHT TWP

(3) ALLOCATED ON DIRECT OPERATING EXPENSE, ADJUSTED FOR ANY COST ASSIGNABLE EXCLUSIVELY TO GR OR RETAIL COMMUNITIES, IF APPLICABLE

CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2013
RATE STUDY- TASKS NO. 4 & 5

ORGANIZATIONAL UNIT: 4401, 4410 & 4480 - ADMINISTRATION

EXPENDITURE SUB-OBJECT		OPERATING EXPENSES	ADJUSTED COST FACTORS	ADJUSTED CURRENT ANNUAL EXPENSES
NO.	DESCRIPTION			
7020	PERMANENT EMPLOYEES	\$ 211,340.75	\$ -	\$ 211,340.75
7105	EMPLOYERS SOCIAL SECURITY	14,211.07	-	14,211.07
7110	HOSPITALIZATION INSURANCE	28,430.02	1,265.14	29,695.16
7115	RETIREE HEALTH CARE	31,798.78	639.16	32,437.94
7120	RETIREMENT FUND CONTRIBUTION	18,385.84	-	18,385.84
7125	SPECIAL PENSION BENEFITS	8,683.28	-	8,683.28
7135	UNEMPLOYMENT COMPENSATION	282.82	-	282.82
7150	LONGEVITY PAY	885.50	-	885.50
7165	SHIFT DIFFERENTIAL	7.30	-	7.30
	TOTAL PERSONAL SERVICES	314,025.36	1,904.30	315,929.66
7260	SUPPLIES	2,209.02	-	2,209.02
7300	POSTAGE	12.95	-	12.95
	TOTAL SUPPLIES	2,221.97	-	2,221.97
8140	COMPUTER SERVICES	157,158.96	(147,766.96)	9,392.00
8180	CONTRACTUAL SERVICES	48,948.48	136,297.00	185,245.48
8355	CLAIMS	127,027.00	97,451.00	224,478.00
8450	INSURANCE PREMIUMS	191,088.98	-	191,088.98
8500	TELEPHONE	3,078.55	-	3,078.55
9000	PRINTING & PUBLISHING	9,497.18	-	9,497.18
9410	BUILDINGS RENTALS OR LEASE	19,258.14	-	19,258.14
9420	EQUIPMENT RENTALS OR LEASE	1,358.91	-	1,358.91
9440	VEHICLE RENTAL/CAR MILEAGE	7,260.08	-	7,260.08
9550	PROFESSIONAL DEVELOPMENT	4,778.49	-	4,778.49
9552	OTHER TRAVEL AND TRAINING	6,929.63	-	6,929.63
9554	LOCAL BUSINESS EXPENSE	3,837.11	-	3,837.11
9556	MEMBERSHIPS	3,882.58	-	3,882.58
9558	SUBSCRIPTIONS AND PUBLICATIONS	74.00	-	74.00
9610	FEES	0.33	-	0.33
	TOTAL OTHER SERVICES & CHARGES	584,178.42	85,981.04	670,159.46
9760	EQUIPMENT	239.19	-	239.19
9765	SOFTWARE	329.77	-	329.77
	TOTAL CAPITAL	568.96	-	568.96
9992	OPERATING TRANSFERS-A87 COST	163,092.00	472,279.00	635,371.00
	TOTAL TRANSFERS/FEES	163,092.00	472,279.00	635,371.00
	ORGANIZATIONAL UNIT TOTAL	\$ 1,064,086.71	\$ 560,164.34	\$ 1,624,251.05

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2013
RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL UNIT: 4413- SDSF- CUST.SERV'S

	EXPENDITURE SUB-OBJECT	OPERATING	ADJUSTED	ADJUSTED
NO.	DESCRIPTION	EXPENSES	COST	CURRENT
			FACTORS	ANNUAL
				EXPENSES
9990	OPERATING TRANS OUT-SUBSIDIES	\$ 2,679,512.00	\$ (120,425.92)	\$ 2,559,086.08
	TOTAL TRANSFERS/FEES	2,679,512.00	(120,425.92)	2,559,086.08
	ORGANIZATIONAL UNIT TOTAL	\$ 2,679,512.00	\$ (120,425.92)	\$ 2,559,086.08

* Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2013
RATE STUDY- TASKS NO. 4 & 5

ORGANIZATIONAL UNIT: 4423- WASTEWATER

EXPENDITURE SUB-OBJECT		OPERATING EXPENSES	ADJUSTED COST FACTORS	ADJUSTED CURRENT ANNUAL EXPENSES
NO.	DESCRIPTION			
7020	PERMANENT EMPLOYEES	\$ 3,613,373.74	\$ -	\$ 3,613,373.74
7025	ACT.ASSIGNMENT	11,033.59	-	11,033.59
7040	TEMPORARY EMPLOYEES	34,741.15	-	34,741.15
7050	REGULAR HOURLY RATE	1,819.74	-	1,819.74
7055	TIME & ONE-HALF	85,738.44	-	85,738.44
7105	EMPLOYERS SOCIAL SECURITY	265,520.70	-	265,520.70
7110	HOSPITALIZATION INSURANCE	802,352.40	35,704.68	838,057.08
7115	RETIREE HEALTH CARE	563,705.91	11,330.49	575,036.40
7120	RETIREMENT FUND CONTRIBUTION	630,529.08	-	630,529.08
7125	SPECIAL PENSION BENEFITS	2,506.63	-	2,506.63
7135	UNEMPLOYMENT COMPENSATION	5,011.81	-	5,011.81
7150	LONGEVITY PAY	37,565.96	-	37,565.96
7165	SHIFT DIFFERENTIAL	14,395.93	-	14,395.93
xxxx	FLOOD EVENT		(96,840.01)	(96,840.01)
	TOTAL PERSONAL SERVICES	6,068,295.08	(49,804.84)	6,018,490.24
7260	SUPPLIES	1,433,977.04	(408,261.29)	1,025,715.75
7300	POSTAGE	228.82	-	228.82
7680	CLOTHING/CLEANING ALLOWANCE	6,994.12	-	6,994.12
7800	INVENTORY - COST OF GOODS SOLD	35,414.24	-	35,414.24
	TOTAL SUPPLIES	1,476,614.22	(408,261.29)	1,068,352.93
8140	COMPUTER SERVICES	177,848.86	(47,431.86)	130,417.00
8180	CONTRACTUAL SERVICES	4,925,887.55	(663,656.46)	4,262,231.09
8500	TELEPHONE	109,814.90	-	109,814.90
9000	PRINTING & PUBLISHING	1,897.56	-	1,897.56
9210	ELECTRICITY	2,387,453.97	(39,846.48)	2,347,607.49
9220	WATER	32,665.45	-	32,665.45
9230	NATURAL GAS	239,190.00	-	239,190.00
9300	MAINTENANCE SERVICE	230,699.28	(100,588.70)	130,110.58
9420	EQUIPMENT RENTALS OR LEASE	241,056.69	-	241,056.69
9440	VEHICLE RENTAL/CAR MILEAGE	3,870.50	-	3,870.50
9550	PROFESSIONAL DEVELOPMENT	2,036.25	-	2,036.25
9552	OTHER TRAVEL AND TRAINING	23,630.14	-	23,630.14
9554	LOCAL BUSINESS EXPENSE	100.00	-	100.00
9556	MEMBERSHIPS	6,880.31	-	6,880.31
9558	PUBLICATIONS AND SUBSCRIPTIONS	2,360.49	-	2,360.49
9610	FEES	21,097.00	-	21,097.00
9622	REFUSE COLLECTION CHARGES	77.94	-	77.94
	TOTAL OTHER SERVICES & CHARGES	8,406,566.89	(851,523.50)	7,555,043.39
9735	BLD. ADDITIONS/IMPROVEMENTS	13,500.00	-	13,500.00
9750	FURNITURE	4,413.86	-	4,413.86
9760	EQUIPMENT	12,018.06	-	12,018.06
9765	SOFTWARE	42,716.60	-	42,716.60
	TOTAL CAPITAL	72,648.52	-	72,648.52
	ORGANIZATIONAL UNIT TOTAL	\$ 16,024,124.71	\$ (1,309,589.63)	\$ 14,714,535.08

CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2013
RATE STUDY- TASKS NO. 4 & 5

ORGANIZATIONAL UNIT: 442305- IND. PRETREATMENT

EXPENDITURE SUB-OBJECT		OPERATING EXPENSES	ADJUSTED COST FACTORS	ADJUSTED CURRENT ANNUAL EXPENSES
NO.	DESCRIPTION			
7020	PERMANENT EMPLOYEES	\$ 339,884.52	\$ -	\$ 339,884.52
7025	ACT.ASSIGNMENT	132.64	-	132.64
7055	TIME & ONE-HALF	4,860.78	-	4,860.78
7105	EMPLOYERS SOCIAL SECURITY	24,716.10	-	24,716.10
7110	HOSPITALIZATION INSURANCE	71,462.77	3,180.09	74,642.86
7115	RETIREE HEALTH CARE	49,092.40	986.76	50,079.16
7120	RETIREMENT FUND CONTRIBUTION	63,071.71	-	63,071.71
7135	UNEMPLOYMENT COMPENSATION	475.81	-	475.81
	TOTAL PERSONAL SERVICES	<u>553,696.73</u>	<u>4,166.85</u>	<u>557,863.58</u>
7260	SUPPLIES	30,038.47	-	30,038.47
7300	POSTAGE	1,020.42	-	1,020.42
7680	CLOTHING/CLEANING ALLOWANCE	2,276.92	-	2,276.92
	TOTAL SUPPLIES	<u>33,335.81</u>	<u>-</u>	<u>33,335.81</u>
8180	CONTRACTUAL SERVICES	23,242.10	-	23,242.10
9000	PRINTING & PUBLISHING	712.35	-	712.35
9420	EQUIPMENT RENTALS OR LEASE	26,516.96	-	26,516.96
9552	OTHER TRAVEL AND TRAINING	518.00	-	518.00
9556	MEMBERSHIPS	743.00	-	743.00
	TOTAL OTHER SERVICES & CHARGES	<u>51,732.41</u>	<u>-</u>	<u>51,732.41</u>
9750	FURNITURE	558.28	-	558.28
	TOTAL CAPITAL	<u>558.28</u>	<u>-</u>	<u>558.28</u>
	ORGANIZATIONAL UNIT TOTAL	<u>\$ 639,323.23</u>	<u>\$ 4,166.85</u>	<u>\$ 643,490.08</u>

CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2013
RATE STUDY- TASKS NO. 4 & 5

ORGANIZATIONAL UNIT: 4425- REPAIR & MAINTENANCE

EXPENDITURE SUB-OBJECT		OPERATING EXPENSES	ADJUSTED COST FACTORS	ADJUSTED CURRENT ANNUAL EXPENSES
NO.	DESCRIPTION			
7020	PERMANENT EMPLOYEES	\$ 1,187,595.17	\$ -	\$ 1,187,595.17
7025	ACT.ASSIGNMENT	2,253.79	-	2,253.79
7040	TEMPORARY EMPLOYEES	168.70	-	168.70
7055	TIME & ONE-HALF	63,715.63	-	63,715.63
7105	EMPLOYERS SOCIAL SECURITY	89,845.89	-	89,845.89
7110	HOSPITALIZATION INSURANCE	301,799.73	13,430.09	315,229.82
7115	RETIREE HEALTH CARE	189,224.06	3,803.40	193,027.46
7120	RETIREMENT FUND CONTRIBUTION	208,617.22	-	208,617.22
7125	SPECIAL PENSION BENEFITS	5,514.49	-	5,514.49
7135	UNEMPLOYMENT COMPENSATION	1,652.55	-	1,652.55
7150	LONGEVITY PAY	10,935.47	-	10,935.47
7165	SHIFT DIFFERENTIAL	208.65	-	208.65
xxxx	FLOOD EVENT		(7,100.83)	(7,100.83)
	TOTAL PERSONAL SERVICES	2,061,531.35	10,132.66	2,071,664.01
7260	SUPPLIES	225,027.84	(274.58)	224,753.26
7680	CLOTHING/CLEANING ALLOWANCE	8,339.87	-	8,339.87
	TOTAL SUPPLIES	233,367.71	(274.58)	233,093.13
8140	COMPUTER SERVICES	19,581.00	153,689.00	173,270.00
8180	CONTRACTUAL SERVICES	1,125,943.94	-	1,125,943.94
8355	CLAIMS	150,000.00	-	150,000.00
8500	TELEPHONE	12,095.42	-	12,095.42
9000	PRINTING & PUBLISHING	7,135.21	-	7,135.21
9210	ELECTRICITY	12,381.89	-	12,381.89
9220	WATER	7,458.62	-	7,458.62
9230	NATURAL GAS	12,075.57	-	12,075.57
9300	MAINTENANCE SERVICE	32,726.42	-	32,726.42
9310	HOME REPAIR	96,657.43	-	96,657.43
9330	PAVEMENT REPAIR	93,669.62	-	93,669.62
9420	EQUIPMENT RENTALS OR LEASE	1,103,150.42	-	1,103,150.42
9430	LAND RENTAL OR LEASE	4,258.53	-	4,258.53
9440	VEHICLE RENTAL/CAR MILEAGE	755.50	-	755.50
9550	PROFESSIONAL DEVELOPMENT	750.15	-	750.15
9552	OTHER TRAVEL AND TRAINING	416.96	-	416.96
9554	LOCAL BUSINESS EXPENSE	62.50	-	62.50
9556	MEMBERSHIPS	250.00	-	250.00
9610	FEES	120.00	-	120.00
	TOTAL OTHER SERVICES & CHARGES	2,679,489.18	153,689.00	2,833,178.18
9750	FURNITURE	399.00	-	399.00
9760	EQUIPMENT	43,000.13	-	43,000.13
9765	SOFTWARE	4,025.00	-	4,025.00
	TOTAL CAPITAL	47,424.13	-	47,424.13
	ORGANIZATIONAL UNIT TOTAL	\$ 5,021,812.37	\$ 163,547.08	\$ 5,185,359.45

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED ACTUAL EXPENSE
YEAR ENDED JUNE 30, 2013
RATE STUDY- TASKS NO. 4 & 5**

ORGANIZATIONAL SUMMARY

NO.	EXPENDITURE SUB-OBJECT DESCRIPTION	OPERATING EXPENSES	ADJUSTED COST FACTORS	ADJUSTED CURRENT ANNUAL CURRENT
7020	PERMANENT EMPLOYEES	\$ 5,352,194.18	\$ -	\$ 5,352,194.18
7025	ACT.ASSIGNMENT	13,420.02	-	13,420.02
7040	TEMPORARY EMPLOYEES	34,909.85	-	34,909.85
7050	REGULAR HOURLY RATE	1,819.74	-	1,819.74
7055	TIME & ONE-HALF	154,314.85	-	154,314.85
7105	EMPLOYERS SOCIAL SECURITY	394,293.76	-	394,293.76
7110	HOSPITALIZATION INSURANCE	1,204,044.92	53,580.00	1,257,624.92
7115	RETIREE HEALTH CARE	833,821.15	16,759.81	850,580.96
7120	RETIREMENT FUND CONTRIBUTION	920,603.85	-	920,603.85
7125	SPECIAL PENSION BENEFITS	16,704.40	-	16,704.40
7135	UNEMPLOYMENT COMPENSATION	7,422.99	-	7,422.99
7150	LONGEVITY PAY	49,386.93	-	49,386.93
7165	SHIFT DIFFERENTIAL	14,611.88	-	14,611.88
xxx	FLOOD EVENT	-	(103,940.84)	(103,940.84)
	TOTAL PERSONAL SERVICES	8,997,548.52	(33,601.03)	8,963,947.49
7260	SUPPLIES	1,691,252.37	(408,535.87)	1,282,716.50
7300	POSTAGE	1,262.19	-	1,262.19
7680	CLOTHING/CLEANING ALLOWANCE	17,610.91	-	17,610.91
7800	INVENTORY - COST OF GOODS SOLD	35,414.24	-	35,414.24
	TOTAL SUPPLIES	1,745,539.71	(408,535.87)	1,337,003.84
8140	COMPUTER SERVICES	354,588.82	(41,509.82)	313,079.00
8180	CONTRACTUAL SERVICES	6,124,022.07	(527,359.46)	5,596,662.61
8355	CLAIMS	277,027.00	97,451.00	374,478.00
8450	INSURANCE PREMIUMS	191,088.98	-	191,088.98
8500	TELEPHONE	124,988.87	-	124,988.87
9000	PRINTING & PUBLISHING	19,242.30	-	19,242.30
9210	ELECTRICITY	2,399,835.86	(39,846.48)	2,359,989.38
9220	WATER	40,124.07	-	40,124.07
9230	NATURAL GAS	251,265.57	-	251,265.57
9300	MAINTENANCE SERVICE	263,425.70	(100,588.70)	162,837.00
9310	HOME REPAIR	96,657.43	-	96,657.43
9330	PAVEMENT REPAIR	93,669.62	-	93,669.62
9410	BUILDINGS RENTALS OR LEASE	19,258.14	-	19,258.14
9420	EQUIPMENT RENTALS OR LEASE	1,372,082.98	-	1,372,082.98
9430	LAND RENTAL OR LEASE	4,258.53	-	4,258.53
9440	VEHICLE RENTAL/CAR MILEAGE	11,886.08	-	11,886.08
9550	PROFESSIONAL DEVELOPMENT	7,564.89	-	7,564.89
9552	OTHER TRAVEL AND TRAINING	31,494.73	-	31,494.73
9554	LOCAL BUSINESS EXPENSE	3,999.61	-	3,999.61
9556	MEMBERSHIPS	11,755.89	-	11,755.89
9558	SUBSCRIPTIONS AND PUBLICATIONS	2,434.49	-	2,434.49
9610	FEES	21,217.33	-	21,217.33
9622	REFUSE COLLECTION CHARGES	77.94	-	77.94
	TOTAL OTHER SERVICES & CHARGES	11,721,966.90	(611,853.46)	11,110,113.44
9735	BLD. ADDITIONS/IMPROVEMENTS	13,500.00	-	13,500.00
9750	FURNITURE	5,371.14	-	5,371.14
9760	EQUIPMENT	55,257.38	-	55,257.38
9765	SOFTWARE	47,071.37	-	47,071.37
	TOTAL CAPITAL	121,199.89	-	121,199.89
9992	OPERATING TRANSFERS-A87 COST	163,092.00	472,279.00	635,371.00
9990	OPERATING TRANS OUT-SUBSIDIES	2,679,512.00	(120,425.92)	2,559,086.08
	TOTAL TRANSFERS/FEES	2,842,604.00	351,853.08	3,194,457.08
	GRAND TOTAL- EXPENDITURES	\$ 25,428,859.02	\$ (702,137.28)	\$ 24,726,721.74

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 14, 2013

TO: Eric R. DeLong
Deputy City Manager

FROM: Geri D. Eye, CPA 
Utility Financial Officer

SUBJECT: **2013 SEWER RATE STUDY TASK #4**
FY13 OPERATING EXPENSES - SEWAGE PUMPING STATIONS

The attached schedule allocates the direct cost for operating and maintaining system pumping and metering stations. The operating expense consists of direct labor, utilities, operating and maintenance supplies, repairs and maintenance, and vehicle rental.

The overflow regulators are components of the integrated system and subsequently not included herein.

Attachment

GDE:ss

**CITY OF GRAND RAPIDS, MICHIGAN
INVENTORY OF SEWAGE PUMPING/METER STATIONS
FOR THE YEAR ENDED JUNE 30, 2013**

<u>Station</u>	<u>Physical Location</u>	<u>Type</u>	<u>FY'13 Expenses</u>
Market Avenue	Grand Rapids	Interceptor	\$275,264.99
Millbank	Grand Rapids	Local	7,678.34
Eastlake	Grand Rapids	Local	6,377.65
Eastern	Grand Rapids	Trunk	6,341.65
Middleboro	Grand Rapids	Trunk	0.00
Oak Hollow	Grand Rapids Twmsp	Local	10,687.17
Kingsbury	Walker	Trunk	13,673.40
Bona Vista	Grand Rapids	Trunk	12,215.83
Aberdeen	Grand Rapids	Local	12,272.29
O'Brien	Walker	Trunk	38,907.89
Leonard Heights	Walker	Trunk	17,116.32
Guild	Grand Rapids	Local	4,328.31
Orchard Vista	Cascade Twmsp	Local	7,649.19
Brookview	Grand Rapids	Trunk	13,462.84
Remembrance Road	Walker	Local	61,264.71
Kraft Avenue	Cascade Twmsp	Local	10,603.46
Thornapple	Cascade Twmsp	Trunk	18,888.94
Thornhills	Cascade Twmsp	Local	7,770.90
Greenbrier	Grand Rapids Twmsp	Local	10,568.09
Shore Haven	Grand Rapids Twmsp	Local	9,884.22
Ada	Ada	Local	14,154.09
Robinhood	Grand Rapids Twmsp	Local	9,575.65
Lincoln School	Grand Rapids Twmsp	Local	4,027.93
Reeds Lake Blvd.	Grand Rapids Twmsp	Local	9,918.04
6000 28th Street	Cascade Twmsp	Local	6,543.95
Ada	Ada	Meter	2,581.26
East Grand Rapids	East Grand Rapids	Meter	2,803.94
Gaines Township	Gaines Township	Meter	2,532.75
Kentwood	Kentwood	Meter	3,427.96
Rickman Avenue	Grand Rapids	Local	6,235.45
Michigan Street	Grand Rapids	Local	5,967.44
Eagle Crest	Grand Rapids Twmsp	Local	11,332.66
East Paris	Grand Rapids Twmsp	Local	19,449.45
Alpine Estates	Walker	Local	7,877.11
Elmdale	Grand Rapids	Local	4,017.30
Collindale	Walker	Local	5,577.23
Saddleback	Grand Rapids Twmsp	Local	5,481.51
Arbor Hills Lift Station	Grand Rapids Twmsp	Local	6,181.24
Cypress Trails	Grand Rapids Twmsp	Local	5,834.18
Bird Avenue	Grand Rapids Twmsp	Local	31,509.34
Valentine	Grand Rapids Twmsp	Local	4,465.33
Cascade Springs	Cascade Twmsp	Local	9,110.10
Churchill Downs	Grand Rapids	Local	9,810.30
Woodsboro Court	Grand Rapids Twmsp	Local	3,400.62
Meadowood Trails	Cascade Twmsp	Local	7,808.24
Stonebridge	Grand Rapids Twmsp	Local	4,754.81
Burton/Cacade	Cascade Twmsp	Local	20,714.75
Crahen	Grand Rapids Twmsp	Local	5,206.08
Jonathan Woods	Cascade Twmsp	Local	4,963.20
Watermark	Cascade Twmsp	Local	10,204.52
Mountain Ash	Tallmadge Twmsp	Local	7,743.85
Reeds Hollow	Grand Rapids Twmsp	Local	8,963.15
16th Avenue Lift Station	Marne	Local	6,848.32
Hayes West Lift Station	Tallmadge	Local	6,409.12
Hayes East Lift Station	Tallmadge	Local	4,237.47
8th & Leonard LS	Tallmadge	Local	4,483.82
Summit Ridge LS	Grand Rapids	Local	4,219.99
Lake Michigan Estates	Tallmadge	Local	6,029.94
			<u><u>\$839,358.28</u></u>

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 29, 2013

TO: Geri Eye
Utility Financial Officer

FROM: Scott Buhrer 
Chief Financial Officer

**SUBJECT: 2013 SEWER RATE STUDY TASK #5
KNOWN COST ADJUSTMENTS**

Known cost adjustments by which to adjust FY13 operating costs are listed below.

Object Level 3 – 7060, 7020, 7040, 7055, 7025, 7045, 7050, 7030, 7035, 7190

The wage increase factor to translate FY2013 actual costs to estimated calendar 2014 will be 0.0%. Collective bargaining has not concluded and therefore, at this time there is not a known cost increase for wages.

Object Level 3 – 8140/8355/9990

Administration - Adjust FY2013 actual cost to reflect adjustments in charges for central services rendered by the Information Technology Fund, the Insurance Payment Fund and the General Operating Fund.

Object Level 3 - 7105

Increase FY2013 actual FICA expense by 0.0% consistent with the known wage impacts.

Object Level 3 - 7110

The Trend Report is not completed at this time; however, we anticipate favorable results on rates. Although health care costs have been trending higher, the anticipation of favorable cost trends and three-year smoothing has limited the projected increase in health insurance to 4.45%. Increase FY2013 health insurance actual by 4.45% to reflect these anticipated rate changes.

Object Level 3 - 7115

The factor to establish calendar year 2014's retiree health care cost is 2.01%. Increase the total of fiscal year 2013's retiree health care by this percent to establish the cost for calendar year 2014.

Object Level 3 - 7120


The pension expense factor to translate FY2013 actual costs to estimated calendar 2014 will be 0.0%. Had the pension system achieved rates of return consistent with actuarial assumptions, a 16.56% increase in general pension rates would have been projected. However, the pension system achieved superior rates of return that were far in excess of the actuarial assumptions. Therefore, no cost increase in pension expense is being projected for calendar year 2014.

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 29, 2013

TO: Geri D. Eye, CPA
Utility Financial Officer

FROM:  Michael J. Lunn
Environmental Services Manager

SUBJECT: 2013 SEWER RATE STUDY TASK #5
KNOWN COST ADJUSTMENTS

Known cost adjustments by which to adjust FY13 operating costs are listed below:

<u>ACCOUNT</u> <u>User Code</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>
WWTFLD2013	WWTP Flood Protection	(\$626,263.66)
4410-8180	Utilities Competitive Assessment Project - Phases 1-3	\$137,222.00
4423-8180	GVRBA Contractual Services	(\$651,383.21)
4423-9210	Consumers Energy Efficiency Program	(\$39,846.48)

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 14, 2013

TO: Eric R. DeLong
Deputy City Manager

FROM: Geri D. Eye, CPA
Utility Financial Officer



SUBJECT: 2013 SEWER RATE STUDY TASK #6

The Sewage Disposal System Fund's revenues and volumes by governmental unit for the year ended June 30, 2013, are disclosed on the attached page. In addition, actual volume comparisons for the past five (5) years by governmental unit are included herein.

Attachments

GDE:ss

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 6**

DETERMINE SEWAGE VOLUME AND REVENUE BY GOVERNMENTAL ENTITY FOR THE YEAR ENDED JUNE 30, 2013:

	SALES REVENUE	3 YR AVE BILLED VOL (GALLONS)
RETAIL:		
CITY OF GRAND RAPIDS (1)	\$ 31,158,246.17	5,069,894,632
CITY OF WALKER	4,418,884.89	617,129,172
CITY OF KENTWOOD	3,640,576.32	1,035,594,032
CASCADE TOWNSHIP	1,986,934.05	296,561,804
GRAND RAPIDS TOWNSHIP	2,345,610.90	298,728,760
TALLMADGE TOWNSHIP	251,198.40	12,607,540
WRIGHT TOWNSHIP (2)	234,190.17	13,796,557
SUB-TOTAL RETAIL (3)	\$ 44,035,640.90	7,344,312,497
WHOLESALE:		
CITY OF E. GRAND RAPIDS	\$ 611,655.59	419,993,033
ADA TOWNSHIP	1,170,944.09	311,422,888
GAINES TOWNSHIP (4)	151,773.59	96,398,300
SUB-TOTAL WHOLESALE	\$ 1,934,373.27	827,814,221
TOTAL	\$ 45,970,014.17	8,172,126,718

REVENUE CLASSIFICATION:

4410 - 607055 RETAIL SEWAGE SERVICE CHARGE	\$ 43,947,350.71
4410 - 607056 WYOMING SEWAGE SERVICE CHARGE	88,290.19
4410 - 607060 WHOLESALE SEWAGE SERVICE CHARGE	1,934,373.27
	<u>\$ 45,970,014.17</u>

- (1) THE VOLUME & DOLLAR AMOUNT FOR THE CITY OF WYOMING ARE INCLUDED IN THE GRAND RAPIDS TOTALS.
- (2) CHARGES TO USERS IN WRIGHT TOWNSHIP ARE BASED ON A REU (RESIDENTIAL EQUIVALENT UNIT) CHARGE, IN LIEU OF COMMODITY & MONTHLY SERVICE CHARGES, AND AS SUCH DOES NOT RECORD ANY BILLED VOLUME IN RETAIL SERVICE CHARGES TO WRIGHT TOWNSHIP. THE AMOUNT INCLUDED ABOVE REFLECTS THE ESTIMATED BILLED VOLUME BASED ON THE WWTP'S LIFT STATION PUMPING REPORT FOR FY 2013.
- (3) A REVENUE ACCRUAL OF \$(1,509,405.66) HAS BEEN PRORATED TO ALL RETAIL CUSTOMER COMMUNITIES TO ACCRUE BILLINGS FROM THE LAST READING DATE THROUGH JUNE 30, 2013, AND ADJUST FOR PREVIOUS FISCAL YEAR ACCRUAL.
- (4) GAINES TWP RATES ARE CALCULATED BASED ON MOST RECENT FISCAL YEAR BILLED VOLUME PER CONTRACT.

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
2013 RATE STUDY TASK NO. 6**

VOLUME COMPARISONS FOR FIVE (5) YEARS BY GOVERNMENTAL UNIT (INCLUDING NORTH KENT & MEIJER-ALGOMA) *
VOLUME = 1,000 GALLONS

<i>MUNICIPALITY</i>	<i>FY09 VOL BILLED</i>	<i>FY10 VOL BILLED % CHANGE</i>	<i>FY11 VOL BILLED % CHANGE</i>	<i>FY12 VOL BILLED % CHANGE</i>	<i>FY13 VOL BILLED % CHANGE</i>	<i>FY09-FY13 % CHANGE</i>
GRAND RAPIDS	5,422,022	5,327,753 -1.74%	5,130,744 -3.70%	5,131,245 0.01%	4,947,696 -3.58%	-8.75%
WALKER	671,946	630,592 -6.15%	628,009 -0.41%	619,441 -1.36%	603,938 -2.50%	-10.12%
KENTWOOD	935,212	938,707 0.37%	1,010,318 7.63%	1,039,550 2.89%	1,056,913 1.67%	13.01%
CASCADE	324,838	287,725 -11.43%	286,529 -0.42%	302,532 5.59%	300,624 -0.63%	-7.45%
GRAND RAPIDS TWP	307,379	300,605 -2.20%	297,595 -1.00%	297,317 -0.09%	301,274 1.33%	-1.99%
TALLMADGE	14,558	13,005 -10.67%	12,739 -2.05%	12,180 -4.39%	12,904 5.94%	-11.36%
WRIGHT TWP	19,523	14,379 -26.35%	13,370 -7.02%	12,457 -6.83%	15,564 24.94%	-20.28%
EAST GRAND RAPIDS	518,933	456,699 -11.99%	444,128 -2.75%	419,817 -5.47%	396,034 -5.67%	-23.68%
NORTH KENT AREA *	*	* N/A	* N/A	* N/A	* N/A	N/A
ADA TWP	337,356	309,321 -8.31%	315,329 1.94%	309,502 -1.85%	309,437 -0.02%	-8.28%
GAINES TWP	112,141	94,689 -15.56%	101,030 6.70%	112,093 10.95%	96,398 -14.00%	-14.04%
MEIJER - ALGOMA *	*	* N/A	* N/A	* N/A	* N/A	N/A
TOTAL	8,663,908	8,373,475 -3.35%	8,239,791 -1.60%	8,256,134 0.20%	8,040,782 -2.61%	-7.19%

* Service ended 11/08.

GRAND RAPIDS VOLUME COMPARED TO
CUSTOMER COMMUNITIES

<i>VOLUME = 1,000 GALLONS</i>	<i>FY09 % OF TOTAL</i>	<i>FY10 VOL BILLED % OF TOTAL</i>	<i>FY11 VOL BILLED % OF TOTAL</i>	<i>FY12 VOL BILLED % OF TOTAL</i>	<i>FY13 VOL BILLED % OF TOTAL</i>
GRAND RAPIDS	62.58%	5,327,753 63.63%	5,130,744 62.27%	5,131,245 62.15%	4,947,696 61.53%
CUSTOMER COMMUNITIES	37.42%	3,045,722 36.37%	3,109,047 37.73%	3,124,889 37.85%	3,093,086 38.47%
TOTAL	100.00%	8,373,475 100.00%	8,239,791 100.00%	8,256,134 100.00%	8,040,782 100.00%

* Volumes were restated from previous Rate Studies to reflect actual billings without adjustment for accrued revenues.

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 7**

OPERATING REVENUES OTHER THAN WASTEWATER RECEIPTS:

4423-476009	INDUSTRIAL PRETREATMENT PERMITS	\$ 61,136.41
4410-607001	MISCELLANEOUS SERVICE FEES	3,960.00
4423-607001	MISCELLANEOUS SERVICE FEES	167.20
4410-607050	INSPECTION FEES - UTILITIES	37,740.00
4410-607057	INDUSTRIAL DISCHARGE AUTHORIZATION	500.00
4423-642003	SALES - OTHER	518.76
4423-642009	SALES OF SCRAP MATERIAL	2,896.83
4423-642019	INVENTORY WITHDRAWALS (SALES)	35,550.15
4410-672002	INTEREST/PENALTIES ON SPEC ASSM	7,023.10
		<u>\$ 149,492.45</u>

CREDIT: UNDERUTILIZATION OF PENALTY CREDIT FROM PREVIOUS YEAR	<u>\$ -</u>
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OTHER OPERATING REVENUES NOT INCLUDED:

CAPITAL CONTRIBUTION

4410-607051	SEWAGE FRONT FOOTAGE	\$ 43,909.00
	AUDITOR'S ADJUSTMENT	-
		<u>\$ 43,909.00</u>

INTEGRATED SYSTEM CREDITS


4410-607053	INTEGRATED SEWER CONNECTION	\$ 782,106.49
4423-607074	SEWAGE SURCHARGE	1,605,631.61
		<u>\$ 2,387,738.10</u>

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 17, 2013

TO: Geri Eye
Utility Financial Officer

FROM: Mike Lunn 
Environmental Services Manager

SUBJECT: 2013 SEWER RATE STUDY- TASK #8

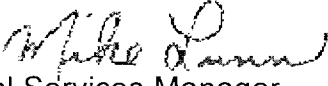
No significant changes in operating levels are anticipated to take effect by January 1, 2014, which would require adjustments to operating costs for the test period.

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 17, 2013

TO: Geri Eye
Utility Financial Officer

FROM: Mike Lunn 
Environmental Services Manager

SUBJECT: **2013 SEWER RATE STUDY- TASK #9**

No significant changes in sewer revenues are anticipated to take effect by January 1, 2014, which would require an adjustment to operating revenue estimates as a whole.

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 6, 2013

TO: Geri Eye
Utility Financial Officer

FROM: Charles R. Schroeder, PE
Assistant ESD Mgr. *C. Schroeder*

SUBJECT: 2013 SEWER RATE STUDY – TASK #10

The following are major sewage system projects (greater than \$100,000) that for rate study purposes, should be considered operative as of January 1, 2014.

<u>Description</u>	<u>Location</u>	<u>Proj. Code</u>	<u>Cost</u>
Elmridge – Westwinde to 3 Mile Rd	Walker	221327-510	\$ 103,656
Elmridge – Westwinde to 3 Mile Rd	Grand Rapids	221327-510	\$ 71,344
Collection Sys Realtime Flow Monitor	Integrated	220907-535	\$1,610,480
Amtrak Station Relocation	Grand Rapids	221241-535	\$ 315,600
Jefferson Ave – Fulton to Cherry	Grand Rapids	221214-510	\$ 514,883
Cherry – Eastern to Hollister	Grand Rapids	228057-510	\$ 168,000
Taylor & Grove	Grand Rapids	221930-535	\$2,222,401
Taylor & Grove	Grand Rapids	228022-510	\$ 428,599
Kraft Ave-60 th St to 2640' N of 60 th	Cascade	Contribution	\$ 214,841

CRS\crs

srs\stask10 2013

CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 11

"COMPUTE ACCUMULATED COST, DEPRECIATION AND DEPRECIATION EXPENSE AS OF JUNE 30, 2013"

INTEGRATED SYSTEM

	ORIGINAL COST	ACCUMULATED DEPRECIATION	DEPRECIATION EXPENSE
LAND	\$ 1,633,122	\$ -	\$ -
LAND IMPROVEMENTS	16,315,449	12,696,623	290,527
BUILDINGS & STRUCTURES	47,778,004	28,578,664	878,206
PROCESS EQUIPMENT	62,187,149	32,045,580	1,587,398
AUXILIARY EQUIPMENT	26,447,812	23,646,448	350,352
MACHINERY & EQUIPMENT	4,867,536	4,694,933	98,070
OFFICE EQUIPMENT & FURNITURE	628,067	619,042	234
	<u>\$ 159,857,139</u>	<u>\$ 102,281,290</u>	<u>\$ 3,204,787</u>

NON-INTEGRATED SYSTEM

	ORIGINAL COST	ACCUMULATED DEPRECIATION	DEPRECIATION EXPENSE
LAND	\$ 2,991,650	\$ -	\$ -
LAND IMPROVEMENTS	3,486,637	998,523	174,504
BUILDINGS & STRUCTURES	10,948,179	2,559,480	259,063
PROCESS EQUIPMENT	16,842,826	5,545,259	524,686
AUXILIARY EQUIPMENT	3,898,571	2,371,779	210,137
MACHINERY & EQUIPMENT	1,646,924	1,124,455	159,820
OFFICE EQUIPMENT & FURNITURE	68,632	68,632	-
SERVICEMAINS - GRAND RAPIDS	335,982,953	89,216,487	6,325,151
SERVICEMAINS - WALKER	38,924,702	13,724,753	773,702
SERVICEMAINS - KENTWOOD	40,677,070	13,247,715	810,466
SERVICEMAINS - CASCADE TWP	19,856,940	7,195,499	397,139
SERVICEMAINS - GRAND RAPIDS TWP	17,656,529	6,251,426	345,390
SERVICEMAINS - TALLMADGE TWP	5,661,019	1,130,166	113,220
SERVICEMAINS - WRIGHT TWP	125,288	18,793	2,506
	<u>\$ 498,767,920</u>	<u>\$ 143,452,967</u>	<u>\$ 10,095,784</u>
TOTAL	<u>\$ 658,625,059</u>	<u>\$ 245,734,257</u>	<u>\$ 13,300,571</u>

SOURCE: GENERAL LEDGER, AS ADJUSTED, FOR JUNE 30, 2013.

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 12**

TASK 12A DETERMINE WORKING CAPITAL NEEDS FOR MATERIALS AND SUPPLIES ON HAND.

MATERIALS AND SUPPLIES INVENTORY AS OF JUNE 30, 2013: \$ 1,091,900

TASK 12B DETERMINE WORKING CAPITAL NEEDS FOR PREPAYMENT OF OPERATING COSTS.

NO REQUIREMENT FOR PREPAYMENT OF OPERATING COSTS IS CALLED
FOR IN THE ORDINARY CYCLE OF BUSINESS.

TASK 12C DETERMINE CASH WORKING CAPITAL NEEDS & DETERMINE TOTAL WORKING
CAPITAL NEEDS.

MINIMUM CASH WORKING CAPITAL IS DEFINED AS THE SUM OF 90 DAYS
ADJUSTED OPERATING EXPENSES.

ADJUSTED CURRENT ANNUAL EXPENSES = \$ 24,726,721 @ 90/365 = \$ 6,097,000

TOTAL WORKING CAPITAL NEEDS CONSIST OF THE FOLLOWING:

12A INVESTMENT IN INVENTORY	\$ 1,091,900
12B PREPAYMENT OF OPERATING EXPENSES	-
12C 90 DAY OPERATING EXPENSES	<u>6,097,000</u>
	<u>\$ 7,188,900</u>

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MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 11, 2013

TO: Geri Eye
Utility Financial Officer

FROM: Charles R. Schroeder, P.E. *CRS*
Assistant Environmental Services Manager

SUBJECT: 2013 SEWER RATE STUDY- TASK #13

In 2013, none of the existing zonegated facilities received improvements and no new zonegated facilities were established within the City of Grand Rapids Sewer System. The existing zonegating maps, the "Report on Sewage Flow Allocation and Zonegating of the Sewage System for Fiscal Year 2002" (Black & Veatch, Ltd. Zonegating Report dated September 2003), and the Joint Use List were all reviewed. From that review, there are no recommended changes for zonegating of the Sewer System facilities for the 2013 Sewer Rate Study.

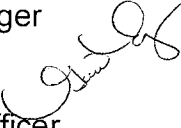
CRS

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 14, 2013

TO: Eric R. DeLong
Deputy City Manager

FROM: Geri D. Eye, CPA 
Utility Financial Officer

SUBJECT: **2013 WATER RATE STUDY TASK #13**
ZONEGATING & JOINT USE ALLOCATION METHODS

Lengths and costs of all primary and intermediate transmission mains that are zonegated were prorated based on billed flow. Jointly used storage tanks and pumping stations were also prorated based on billed flow.

CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
METHODOLOGY FOR I/I & OTHER FLOW APPORTIONMENT - TASK NO. 13

	MILLION GALLONS
1.) ANNUAL WASTEWATER TREATMENT PLANT FLOW	15,100.40
LESS: WHOLESALE BILLED FLOW	(801.87)
LESS: RETAIL BILLED FLOW	(7,238.90)
TOTAL RETAIL I/I & OTHER FLOW	7,059.63
2.) RETAIL INFLOW FROM SEPARATED AREAS (A)	720.99
RETAIL INFLOW FROM COMBINED AREAS - AMOUNT ESTIMATED (A)	1,396.71
LESS: ANNUAL BYPASS FROM (3) PUMPING STATIONS	-
LESS: IN-SYSTEM BYPASS & RETENTION BASIN OVERFLOW	(435.87)
TOTAL RETAIL INFLOW	1,681.83
3.) RETAIL INFILTRATION:	
TOTAL RETAIL I/I & OTHER FLOW	7,059.63
LESS: TOTAL RETAIL INFLOW (#2)	(1,681.83)
	5,377.80
LESS: MARKET AVE RETENTION BASIN (MARB) CAPTURE	(65.55)
TOTAL RETAIL INFILTRATION & OTHER FLOW	5,312.25
4.) ALLOCATION OF RETAIL INFILTRATION & OTHER FLOW - APPORTIONED ON THE BASIS OF B&V SUMMARY OF 1997 MONITORED FLOW DATA (B)	

<u>GOVERNMENTAL UNIT(S)</u>	PRORATA SHARE OF RETAIL INFILTRA- TION & OTHER	MILLION GALLONS
UTILITY PARTNERS	100.0000%	5,312.25
TOTAL	100.0000%	5,312.25

(A) BASED ON RECORDED RAINFALL @ WWTP & APPORTIONED PER BLACK & VEATCH'S SUMMARY OF 1997 MONITORED FLOW DATA.

(B) BASED ON INFILTRATION & OTHER FLOW APPORTIONED IN PREVIOUS YEAR & ADJUSTED FOR SYSTEM ADDITIONS & IMPROVEMENTS IN EACH CUSTOMER COMMUNITY.

CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
METHODOLOGY FOR I/I & OTHER FLOW APPORTIONMENT - TASK NO. 13 (CONTINUED)

5.) SUMMARY: (IN MILLION GALLONS)

<u>GOVERNMENTAL UNIT(S)</u>	<u>BILLED FLOW (TASK #6)</u>	<u>INFLOW (#2 ABOVE)</u>	<u>INFILTRATION & OTHER FLOW (#4 ABOVE)</u>	<u>MARB (A) (#3 ABOVE)</u>	<u>TOTAL PLANT FLOW</u>	<u>PERCENT OF TOTAL</u>	<u>TOTAL PLANT FLOW (MGD)</u>
UTILITY PARTNERS	7,944.37	1,681.83	5,312.25	64.76	15,003.21	99.3564%	41.1047
GAINES TWP	96.40	-	-	0.79	97.19	0.6436%	0.2663
TOTAL	<u>8,040.77</u>	<u>1,681.83</u>	<u>5,312.25</u>	<u>65.55</u>	<u>15,100.40</u>	<u>100.0000%</u>	<u>41.3710</u>

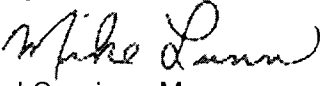
(A) BASED ON BILLED FLOW (TASK #6).

MEMORANDUM

CITY OF GRAND RAPIDS

Date: July 26, 2013

To: Geri Eye, Utility Financial Officer

From: Mike Lunn 
Environmental Services Manager

Subject: 2013 Sewer Rate Study - Wastewater Plant Flow Data

Listed below is the flow data measured in million gallons (MG) for the last two completed fiscal years. Plant flow increase by 1.2% from 14,921.10 MG treated in FY12 to 15,100.40 MG treated in FY13.

Month	FY 2011	FY 2012	FY 2013	% incr (decr)
July	1,343.33	1,338.31	1,056.41	-21.1%
August	1,169.94	1,329.91	1,088.57	-18.1%
September	1,078.00	1,095.80	947.33	-13.5%
October	1,041.49	1,132.82	1,133.31	0.0%
November	997.41	1,149.36	970.74	-15.5%
December	1,049.53	1,276.78	1,073.32	-15.9%
January	1,034.32	1,291.29	1,202.64	-6.9%
February	1,032.11	1,199.29	1,246.63	3.9%
March	1,636.36	1,486.58	1,345.58	-9.5%
April	1,671.09	1,279.82	2,014.65	57.4%
May	1,851.22	1,253.16	1,578.28	25.9%
June	1,416.77	1,087.98	1,442.94	32.6%
Total	15,321.57	14,921.10	15,100.40	1.2%

Data measured	FY 2011	FY 2012	FY 2013	% incr (decr)
Wastewater Treatment Plan (WWTP) avg. daily flow (MG)	41.977	40.880	41.371	1.2%
Rainfall recorded at WWTP (inches)	38.200	35.800	43.880	22.6%
In-system overflows (MG) (report attached)	1.579	0.343	-	-100.0%
Market Avenue Retention Basin (MARB) inflow (MG)	147.880	56.790	501.420	782.9%
Market Avenue Retention Basin (MARB) over flow (MG)	48.474	-	435.870	

cc: Mark DeClercq, City Engineer

CITY OF GRAND RAPIDS, MICHIGAN RATE STUDY MONITORING REPORT OVERFLOW VOLUME SUMMARY

- (1) Rain gauge at WWTP
- (2) Market Avenue Pumping Station
- (3) Market Avenue Retention Basin
- (4) MG = Million Gallons

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 11, 2013

TO: Geri Eye
Utility Financial Officer

FROM: Charles R. Schroeder, PE
Assistant ESD Mgr. *C. Schroeder*

SUBJECT: 2013 SEWER RATE STUDY – TASK #14

Zonegating maps for the sewage system are included in the "Report on Sewage Flow Allocation and Zonegating of the Sewage System" from Black & Veatch, Ltd dated September 2003. The report also contains comprehensive information with respect to the basis for zonegating service mains and other system components, such as lift stations, that service more than one community. The zonegating model has been adjusted to recognize changes in flows related to the Saddleback Sewer project completed in 2010. All zonegating work papers are on file at the Wastewater Treatment Plant Administration Building located at 1300 Market Ave. SW. All zonegating maps are on file in the City Engineer's Office.

CRS\crs

srs\stask14 2013

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 15**

COMPUTE CONSTRUCTION COST RATE BASE (DEPRECIATED PLANT, PLUS WORKING CAPITAL, LESS CSO REVENUE REQUIREMENTS FOR CSO FIXED ASSETS INCLUDED IN TASK #11/21, LESS CONTRIBUTIONS BY OTHERS).

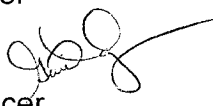
ORIGINAL CONSTRUCTION COST	- TASK #10	\$ 5,434,963	
	- TASK #11	657,820,059	
	- TASK #16/21	<u>(187,363,456)</u>	\$ 475,891,566
LESS: ACCUMULATED DEPRECIATION	- TASK #10	\$ -	
	TASK #11	245,628,055	
	TASK #16/21	<u>(47,066,346)</u>	<u>(198,561,709)</u>
			277,329,857
WORKING CAPITAL REQUIREMENT	- TASK #12	\$ 7,188,900	
		<u>7,188,900</u>	<u>284,518,757</u>
CONTRIBUTIONS BY OTHERS	- TASK #21	\$ 185,867,492	
LESS: AMORTIZATION		<u>(120,868,900)</u>	<u>(64,998,592)</u>
CONSTRUCTION COST RATE BASE			<u><u>\$ 219,520,165</u></u>

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 24, 2013

TO: Eric DeLong
Deputy City Manager

FROM: Geri D. Eye, CPA 
Utility Financial Officer

SUBJECT: **2013 SEWER RATE STUDY TASK #15A
INTEGRATED SEWER CONNECTION FEES**

Attached is the Integrated Sewer Connection Fee Schedule as currently provided for in Chapter 27 of the City Code, with the addition of rates to be effective on January 1, 2014. The City Commission on June 27, 2000 established fees through calendar year 2004. Beginning January 1, 2005, the integrated sewer connection fees are to be calculated on a yearly basis as part of the annual Water/Sewer Rate Study. The Consumer Price Index used to determine rates effective January 1, 2014 is as follows:

August, 2012 Index	230.379
August, 2013 Index	233.877
Increase (decrease)	3.498
Percentage increase (decrease)	1.52%

GDE\lw

Attachment

Section 2.96 Integrated Sewer Connection Fee Schedule

When a property owner or user is requested or required to connect to the System and has not previously paid or been assessed a connection fee, the following connection fee schedule shall apply:

Integrated Connection Base Fee Schedule

Water Meter Size (inches)	<u>1/01/13</u>	<u>1/01/14</u>
3/4 or less	\$ 2,830	\$ 2,873
1	4,730	4,798
1 1/2	9,420	9,567
2	15,080	15,313
3	33,030	33,528
4	59,430	60,333
6 and over	132,080	134,083

Except as otherwise provided in the immediately succeeding paragraph, the foregoing integrated sewer connection base fee schedule for single-family and multi-family residential dwelling units shall be adjusted upward and downward as follows: A single-family residential dwelling unit located on a parcel containing twenty thousand (20,000) square feet shall pay the applicable integrated connection fee in accordance with the foregoing schedule. When determining the square footage of a residential parcel for the purposes of determining the appropriate integrated connection fee, parcel size may be adjusted downward to take into consideration such things as wetlands, lakes, streams and other unusual characteristics of the parcel in accordance with policies approved from time to time by the Utility Advisory Board. To the extent the size of a parcel, as adjusted, is greater than or less than twenty thousand (20,000) square feet, one-half the applicable integrated connection fee will increase or decrease by the same percentage increase or decrease in the parcel above or below twenty thousand (20,000) square feet. In the case of multi-family residential dwellings, in order to determine the size of the parcel assigned to each dwelling unit for purposes of calculating the integrated connection fee to be paid by each multi-family residential dwelling unit, the total square footage of the parcel, as adjusted, on which the multi-family residential dwelling is located shall be divided by the total number of residential units. Notwithstanding any other provision in this subsection, the integrated connection fee for a single-family residential dwelling unit or multi-family residential dwelling unit shall not exceed four and one-half times the applicable base integrated connection fee set forth in foregoing schedule.

There shall be no upward adjustment in the integrated sewer service connection fee payable for a single-family residential dwelling unit connecting to the Sewer System if (a) each of the following conditions are met (1) a building permit shall have been obtained, (2) the dwelling unit shall have been constructed, and (3) a certificate of occupancy shall have been issued prior to January 1, 2000 or (b) local building permit fees have been paid to the local governmental unit prior to January 1, 2000 for a single-family residential dwelling unit to be

constructed on or after January 1, 2000. When connecting to the Sewer System, Users living in or owning such single-family residential dwelling units shall pay the applicable base integrated connection fee set forth in the Integrated Connection Base Fee Schedule adjusted downward, if applicable, in accordance with the immediate preceding paragraph.

Effective January 1, 2005 and January 1st of every year thereafter, the Integrated Sewer Connection Base Fees shall be adjusted by a percentage, which is determined by the annual change in the Consumer Price Index (the "index") calculated as follows:

- (1) The Consumer Price Index shall be that Index referred to as the Consumer Price Index, US City Average, All Urban Consumers, published by the U.S. Department of Labor-Bureau of Statistics ((1982-84)=100). In the event the method of determining the Index is substantially altered, the basis for determining the annual change thereafter shall be the Index which is most comparable to the Index described above.
- (2) For the purpose of computing the percentage change each calendar year, the Index for the month of August for the prior calendar year shall be subtracted from the Index for the immediately-preceding August. The result so obtained (if positive) shall be divided by the Index for the month of August for the prior calendar year to obtain the percentage increase which shall be applied to the then current Integrated Sewer Connection Base Fee Schedule to determine the new calendar year schedule.

The foregoing Integrated Connection fee is due and payable at the time a User receives a permit to connect to the Sewer System. A permit issued by the City to connect to the Sewer System shall expire one hundred eighty (180) days from the date the permit was issued.

The user receiving services who applies for a larger water meter than the one presently in service shall pay an Integrated Connection Fee which is the difference in cost between the meter size in service and the one applied for in accordance with the Integrated Connection Fee in effect at the time of application. No credit or rebate shall be made in the case of application for a smaller meter size.

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**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
CSO REVENUE REQUIREMENTS - TASK 16
PRINCIPAL & INTEREST ON REVENUE BONDS & SRF
DEBT FOR CALENDAR YEAR 2013 - ACCRUAL BASIS**

DATE	SRF/REVENUE REFERENCE		REVENUE BONDS			STATE REVOLVING FUNDS		TOTAL		TOTAL PRINCIPAL & INTEREST
	5073-	SERIES	PRINCIPAL	INTEREST	EST. FEES	PRINCIPAL	INTEREST	PRINCIPAL	INTEREST	
07/01/14	N/A	1998 (1)		\$ 470,170.42	\$ 1,250.00			\$ -	\$ 471,420.42	\$ 471,420.42
01/01/15	N/A	1998 (1)	\$ 1,777,248.00	470,170.42	1,250.00			1,777,248.00	471,420.42	2,248,668.42
07/01/14	N/A	2005 (2)		524,400.00	800.00			0.00	525,200.00	525,200.00
01/01/15	N/A	2005 (2)		524,400.00	800.00			0.00	525,200.00	525,200.00
07/01/14	N/A	2008 (3)		546,925.00	900.00			0.00	547,825.00	547,825.00
01/01/15	N/A	2008 (3)	525,000.00	546,925.00	900.00			525,000.00	547,825.00	1,072,825.00
07/01/14	N/A	2010A (4)		318,748.42	0.00			0.00	318,748.42	318,748.42
01/01/15	N/A	2010A (4)		318,748.42	0.00			0.00	318,748.42	318,748.42
07/01/14	N/A	2013 (5)		640,775.88	600.00			0.00	641,375.88	641,375.88
01/01/15	N/A	2013 (5)	328,887.50	640,775.88	600.00			328,887.50	641,375.88	970,263.38
04/01/14	07	1993B					2,250.00 (6)	0.00	2,250.00	2,250.00
10/01/14		SRF				450,000.00	4,500.00	450,000.00	4,500.00	454,500.00
04/01/15							0.00 (6)	0.00	0.00	0.00
04/01/14	09	1994A					3,050.00 (6)	0.00	3,050.00	3,050.00
10/01/14		SRF				610,000.00	6,100.00	610,000.00	6,100.00	616,100.00
04/01/15							0.00 (6)	0.00	0.00	0.00
04/01/14	10	1994B				150,000.00	3,000.00 (6)	150,000.00	3,000.00	153,000.00
10/01/14		SRF					3,000.00	0.00	3,000.00	3,000.00
04/01/15						150,000.00	1,500.00 (6)	150,000.00	1,500.00	151,500.00
04/01/14	11	1995A				93,388.03	2,925.45 (6)	93,388.03	2,925.45	96,313.48
10/01/14		SRF					3,749.67	0.00	3,749.67	3,749.67
04/01/15						82,547.13	1,874.84 (6)	82,547.13	1,874.84	84,421.97
04/01/14	12	1995B					3,487.50 (6)	0.00	3,487.50	3,487.50
10/01/14		SRF				200,000.00	6,975.00	200,000.00	6,975.00	206,975.00
04/01/15							2,362.50 (6)	0.00	2,362.50	2,362.50
(1) PRORATED AMOUNT OF 1998 ISSUE RELATED TO CSO DEBT.								<u>\$4,367,070.66</u>	<u>\$5,053,914.38</u>	<u>\$9,420,985.04</u>
(2) DS ON ES CSO PORTION OF 2005 ISSUE. (\$21.355M)										
(3) DS ON ES CSO PORTION OF 2008 ISSUE. (\$24.805M)										
(4) DS ON ES CSO PORTION OF 2010A&B ISSUE. (\$14.05M)										
(5) PRORATED AMOUNT OF 2013 ISSUE RELATED TO CSO DEBT.										
(6) PRORATED FOR APPLICABLE THREE (3) MONTH PERIOD IN CALENDAR YEAR 2014.										

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 16A**

INCLUDE MAJOR PROJECT COST FOR UPCOMING SYSTEM IMPROVEMENTS (NON-INTEGRATED)

THE ESTIMATED TOTAL PROJECT COST FOR RECOMMENDED SEWAGE SYSTEM IMPROVEMENTS
ARE SUMMARIZED IN THE FOLLOWING TABLE.

ITEM NO.	DESCRIPTION	ESTIMATED COST	BUDGET YEAR
1	ROBINHOOD LIFT STATION UPGRADES	530,000	2014
2	ESCSO #21	5,300,000	2014
3	ESCSO #22	2,500,000	2014
4	ESCSO #27	3,465,000	2015
5	KINGSBURY LIFT STATION REPLACEMENT	1,200,000	2015
6	ESCSO #28	3,400,000	2016
7	PLASTER CREEK SANITARY TRUNK SEWER	1,200,000	2016
8	PLASTER CREEK SANITARY TRUNK SEWER	6,750,000	2017
9	PLASTER CREEK SANITARY TRUNK SEWER	6,750,000	2018
		<u>\$ 31,095,000</u>	

NOTE: NONE OF THE PROJECTS ABOVE ARE INCLUDED IN RECOMMENDED REVENUE REQUIREMENTS FOR CALENDAR YEAR 2014. COSTS SHOWN ARE IN 2013 DOLLARS.

SOURCE: CHUCK SCHROEDER, ASSISTANT ENVIRONMENTAL SERVICES MANAGER, OCTOBER 2013

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 17**

BONDS - PRINCIPAL & INTEREST PAYMENTS (SENIOR)

FISCAL YEAR ENDING JUNE 30,	CASH BASIS		
	PRINCIPAL	INTEREST	PRIN & INT
2014	\$ 6,550,000	\$ 11,886,777	\$ 18,436,777
2015	6,485,000	12,198,995	18,683,995
2016	6,760,000	11,914,008	18,674,008
2017	7,075,000	11,617,227	18,692,227
2018	7,410,000	11,285,552	18,695,552
2019	7,785,000	10,916,477	18,701,477
2020	8,165,000	10,527,802	18,692,802
2021	8,525,000	10,116,952	18,641,952
2022	8,240,000	9,693,702	17,933,702
2023	10,770,000	9,266,602	20,036,602
2024	11,315,000	8,731,020	20,046,020
2025	11,875,000	8,166,652	20,041,652
2026	12,480,000	7,573,870	20,053,870
2027	13,110,000	6,953,086	20,063,086
2028	13,705,000	6,352,555	20,057,555
2029	9,630,000	5,722,930	15,352,930
2030	10,090,000	5,271,259	15,361,259
2031	10,565,000	4,797,792	15,362,792
2032	11,075,000	4,301,880	15,376,880
2033	11,630,000	3,751,058	15,381,058
2034	13,835,000	3,172,590	17,007,590
2035	12,265,000	2,484,011	14,749,011
2036	7,240,000	1,907,272	9,147,272
2037	7,590,000	1,556,837	9,146,837
2038	7,960,000	1,189,408	9,149,408
2039	5,555,000	821,798	6,376,798
2040	5,795,000	585,946	6,380,946
2041	6,045,000	339,886	6,384,886
2042	2,080,000	83,200	2,163,200
	\$ 261,605,000	\$ 183,187,144	\$ 444,792,144

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 18**

DETERMINE SEWER SYSTEM EQUITY IN THE CONSTRUCTION COST RATE BASE BY
SUBTRACTING NON-CSO DEBT OUTSTANDING FROM THE TOTAL RATE BASE.

CONSTRUCTION COST RATE BASE - TASK NO. 15	\$ 219,520,165
LESS: BONDED INDEBTEDNESS (ACCRUAL) - TASK NO. 17 / 20	(140,790,466)
NET SEWER SYSTEM EQUITY	<u>\$ 78,729,699</u>

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE OF RETURN ON EQUITY - TASK NO. 19**

AT THE APRIL 5, 1977, COMMITTEE OF THE WHOLE MEETING, THE CITY COMMISSION DECIDED THE LEVEL OF RETURN ON SEWER SYSTEM EQUITY. THE LEVEL DECIDED UPON WAS ONE PERCENT MORE THAN THE AVERAGE BOND BUYER'S INDEX OF MUNICIPAL BONDS FOR THE PREVIOUS TWELVE MONTH PERIOD.

BOND BUYER'S INDEX OF 20 MUNICIPAL BONDS

<u>DATE</u>	<u>RATE</u>	<u>DATE</u>	<u>RATE</u>
04-Oct-12	3.610%	04-Apr-13	3.960%
11-Oct-12	3.640%	11-Apr-13	3.930%
18-Oct-12	3.680%	18-Apr-13	3.890%
25-Oct-12	3.680%	25-Apr-13	3.900%
01-Nov-12	3.670%	02-May-13	3.770%
08-Nov-12	3.550%	09-May-13	3.670%
15-Nov-12	3.410%	16-May-13	3.610%
22-Nov-12	3.370%	23-May-13	3.700%
29-Nov-12	3.290%	30-May-13	3.840%
06-Dec-12	3.270%	06-Jun-13	3.930%
13-Dec-12	3.440%	13-Jun-13	4.160%
20-Dec-12	3.640%	20-Jun-13	4.370%
27-Dec-12	3.580%	27-Jun-13	4.630%
03-Jan-13	3.680%	04-Jul-13	4.390%
10-Jan-13	3.600%	11-Jul-13	4.550%
17-Jan-13	3.530%	18-Jul-13	4.520%
24-Jan-13	3.540%	25-Jul-13	4.770%
31-Jan-13	3.670%	01-Aug-13	4.700%
07-Feb-13	3.680%	08-Aug-13	4.730%
14-Feb-13	3.720%	15-Aug-13	4.800%
21-Feb-13	3.740%	22-Aug-13	4.910%
28-Feb-13	3.740%	29-Aug-13	4.960%
07-Mar-13	3.860%	05-Sep-13	5.030%
14-Mar-13	4.000%	12-Sep-13	4.930%
21-Mar-13	3.990%	19-Sep-13	4.660%
28-Mar-13	3.990%	26-Sep-13	4.530%
		<u>52 WEEKS</u>	<u>3.989%</u>

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 20**

DETERMINE COMPOSITE RATE OF RETURN ON CONSTRUCTION COST RATE BASE

	<u>RATE BASE</u>		<u>RATE OF RETURN</u>		<u>RETURN ON INVESTMENT</u>
SEWER SYSTEM EQUITY IN THE CONSTRUCTION COST RATE (CCR) BASE	\$ 78,729,699	@	4.989%	=	\$ 3,927,825
SEWER SYSTEM INDEBTEDNESS (NON-CSO) IN THE CONSTRUCTION COST RATE BASE					
1998 ISSUE (refinanced amount of 1990 issue)	11,707,168	@	5.06%	=	592,383
2004 ISSUE (refinanced by 2013 issue)	215,000	@	4.97%	=	10,686
2005 ISSUE	25,345,000	@	4.90%	=	1,241,905
2008 ISSUE	39,295,000	@	4.92%	=	1,933,314
2010 ISSUE	29,625,000	@	5.00%	=	1,481,250
2010A&B ISSUE	10,370,000	@	4.37%	=	453,169
2011 SRF (amount in CCRB)	1,606,177	@	2.50%	=	40,154
2012 ISSUE (amount in CCRB)	14,777,396	@	4.48%	=	662,027
2013 ISSUE (refinanced amount of 2004 issue)	7,849,725	@	4.43%	=	347,743
LESS INTEREST ON BOND RESERVE ACCOUNTS					(10,013)
	<u>\$ 219,520,165</u>				<u>\$ 10,680,443</u>
COMPOSITE RATE OF RETURN ON INVESTMENT			<u>\$ 10,680,443</u>	=	4.865%
			219,520,165		

CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
CONSTRUCTION COST RATE BASE & RETURN ON SYSTEM INVESTMENT- TASK NO. 21- PART1
FISCAL YEAR ENDED JUNE 30, 2013

PHYSICAL LOCATION

DESCRIPTION	INTEGRATED SYSTEM	RETAIL							WHOLESALE			TOTAL
		CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR	ADA TOWNSHIP	GAINES TOWNSHIP	
COST	\$ 161,467,619	\$ 171,561,377	\$ 40,746,143	\$ 30,728,781	\$ 18,490,455	\$ 20,272,791	\$ 4,911,989	\$ 118,230	\$ -	\$ -	\$ -	\$ 448,297,385
LESS: ACCUMULATED DEPRECIATION	102,281,290	48,548,513	14,243,151	11,569,557	7,222,829	6,570,318	1,113,920	55,074	-	-	-	191,602,652
NET BOOK VALUE	\$ 59,186,329	\$ 123,014,864	\$ 26,502,992	\$ 19,159,224	\$ 11,267,626	\$ 13,702,473	\$ 3,798,069	\$ 63,156	\$ -	\$ -	\$ -	\$ 256,694,733
WORKING CAPITAL REQUIREMENT	4,533,034	1,636,194	343,773	236,443	157,796	214,732	25,952	21,854	4,170	11,358	3,594	7,188,900
	\$ 63,719,363	\$ 124,651,058	\$ 26,846,765	\$ 19,395,667	\$ 11,425,422	\$ 13,917,205	\$ 3,824,021	\$ 85,010	\$ 4,170	\$ 11,358	\$ 3,594	\$ 263,883,633
CONTRIBUTIONS	47,634,621	53,930,512	22,991,822	23,206,586	16,592,805	14,150,997	4,560,073	-	-	-	-	183,067,416
LESS AMORTIZATION	(42,082,139)	(42,973,583)	(10,012,154)	(10,815,146)	(6,920,900)	(5,583,416)	(979,101)	-	-	-	-	(119,366,439)
	\$ (5,552,482)	\$ (10,956,929)	\$ (12,979,668)	\$ (12,391,440)	\$ (9,671,905)	\$ (8,567,581)	\$ (3,580,972)	\$ -	\$ -	\$ -	\$ -	\$ (63,700,977)
CONSTRUCTION COST RATE BASE	\$ 58,166,881	\$ 113,694,129	\$ 13,867,097	\$ 7,004,227	\$ 1,753,517	\$ 5,349,624	\$ 243,049	\$ 85,010	\$ 4,170	\$ 11,358	\$ 3,594	\$ 200,182,656
RETURN ON INVESTMENT- TASK 20	4.865%	\$ 2,829,819	\$ 5,531,219	\$ 674,634	\$ 340,756	\$ 85,309	\$ 260,259	\$ 11,824	\$ 4,136	\$ 203	\$ 553	\$ 9,738,887

ZONEGATED

COST	\$ -	\$ (1,966,083)	\$ 8,333,388	\$ 2,825,570	\$ 4,653,101	\$ 5,366,103	\$ 753,413	\$ 1,343,190	\$ 252,987	\$ 5,172,448	\$ 860,064	\$ 27,594,181
LESS: ACCUMULATED DEPRECIATION	-	(994,726)	2,186,133	1,476,629	1,129,863	1,364,124	88,692	308,297	238,896	728,494	432,655	6,959,057
NET BOOK VALUE	\$ -	\$ (971,357)	\$ 6,147,255	\$ 1,348,941	\$ 3,523,238	\$ 4,001,979	\$ 664,721	\$ 1,034,893	\$ 14,091	\$ 4,443,954	\$ 427,409	\$ 20,635,124
WORKING CAPITAL REQUIREMENT	\$ -	\$ (971,357)	\$ 6,147,255	\$ 1,348,941	\$ 3,523,238	\$ 4,001,979	\$ 664,721	\$ 1,034,893	\$ 14,091	\$ 4,443,954	\$ 427,409	\$ 20,635,124
CONTRIBUTIONS	-	-	10,447	1,393,618	311,845	117,315	159	192	-	193,621	772,879	2,800,076
LESS AMORTIZATION	-	-	(10,447)	(780,426)	(174,633)	(66,620)	(159)	(192)	-	(108,428)	(361,556)	(1,502,461)
	\$ -	\$ -	\$ -	\$ (613,192)	\$ (137,212)	\$ (50,695)	\$ -	\$ -	\$ -	\$ (85,193)	\$ (411,323)	\$ (1,297,615)
CONSTRUCTION COST RATE BASE	\$ -	\$ (971,357)	\$ 6,147,255	\$ 735,749	\$ 3,386,026	\$ 3,951,284	\$ 664,721	\$ 1,034,893	\$ 14,091	\$ 4,358,761	\$ 16,086	\$ 19,337,509
RETURN ON INVESTMENT- TASK 19/21	\$ -	\$ (82,458)	\$ 521,840	\$ 62,458	\$ 287,440	\$ 335,424	\$ 56,428	\$ 87,852	\$ 1,196	\$ 370,015	\$ 783	\$ 1,640,978
RETURN ON INVESTMENT- TASK 19/21	8.489%	8.489%	8.489%	8.489%	8.489%	8.489%	8.489%	8.489%	8.489%	8.489%	8.489%	
TOTAL RETURN ON INVESTMENT	\$ 2,829,819	\$ 5,448,761	\$ 1,196,474	\$ 403,214	\$ 372,749	\$ 595,683	\$ 68,252	\$ 91,988	\$ 1,399	\$ 370,568	\$ 958	\$ 11,379,865

**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
CONSTRUCTION COST & ACCUMULATED DEPRECIATION- TASK NO. 21- PART2
FISCAL YEAR ENDED JUNE 30, 2013**

CONSTRUCTION COST

COST CENTER	AMOUNT	INTEGRATED SYSTEM	RETAIL							WHOLESALE			TOTAL
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR	ADA TOWNSHIP	GAINES TOWNSHIP	
BY PHYSICAL LOCATION- TASK 11		\$ 159,857,139	\$ 368,594,069	\$42,313,798	\$40,677,070	\$20,555,597	\$20,413,075	\$ 6,017,965	\$ 196,346	\$ -	\$ -	\$ -	\$558,625,059
ADD: IN SERVICE- TASK 10		1,610,480	3,720,827	103,656	-	-	-	-	-	-	-	-	5,434,963
MARNE CONNECTOR AGREEMENT			(211,573)					(515,311)	(78,116)				(805,000)
SADDLEBACK SEWER			(1,187,160)		1,115,707	71,453							-
TASK 11/16/21- CSO FA AMT			(187,363,456)										(187,363,456)
LIFT STATIONS / CHAMBERS:													
FULLER-BROOKVIEW	\$ 1,252,893		(572,823)	-	-	-	572,823	-	-	-	-	-	-
FULTON- MIDDLEBORROW	37,983		(37,407)	-	-	-	37,407	-	-	-	-	-	-
WEALTHY ST EXT. CHAMBER	458,953		(96,169)	90,565	-	-	-	5,604	-	-	-	-	-
WEALTHY	20,444		(12,401)	12,084	-	-	-	36	281	-	-	-	-
MARKET	12,965,095		(2,363,406)	1,914,296	-	-	384,674	29,171	35,265	-	-	-	-
VANPORTFLIET / LEONARD HTS	1,239,326		249,191	(249,191)	-	-	-	-	-	-	-	-	-
REMEMBRANCE / 3 MILE	1,213,244		-	(141,355)	-	-	-	15,954	125,401	-	-	-	-
16th AVENUE	71,058												
HAYES- WEST	141,105		-	-	-	-	-	(141,105)	141,105	-	-	-	-
HAYES- EAST	215,841		-	-	-	-	-	-	-	-	-	-	-
O'BRIEN	546,532		16,401	(47,608)	-	-	-	31,207	-	-	-	-	-
SERVICEMAINS			(11,140,799)	5,083,286	(8,238,426)	2,516,506	4,230,915	221,881	1,041,138	252,987	5,172,448	860,064	-
ADJUSTED BY ZONEGATING		\$ 161,467,619	\$ 169,595,294	\$49,079,531	\$33,554,351	\$23,143,556	\$25,638,894	\$ 5,665,402	\$ 1,461,420	\$ 252,987	\$ 5,172,448	\$ 860,064	\$475,891,566
ZONEGATING ADJUSTMENT		\$ -	\$ (1,966,083)	\$ 8,333,388	\$ 2,825,570	\$ 4,653,101	\$ 5,366,103	\$ 753,413	\$ 1,343,190	\$ 252,987	\$ 5,172,448	\$ 860,064	\$ 27,594,181
PHYSICAL LOCATION		\$ 161,467,619	\$ 171,561,377	\$40,746,143	\$30,728,781	\$18,490,455	\$20,272,791	\$ 4,911,989	\$ 118,230	\$ -	\$ -	\$ -	\$448,297,385

ACCUMULATED DEPRECIATION

BY PHYSICAL LOCATION- TASK 11		\$ 102,281,290	\$ 100,264,078	\$14,537,608	\$13,247,715	\$ 7,371,147	\$ 6,688,157	\$ 1,279,823	\$ 64,439	\$ -	\$ -	\$ -	\$245,734,257
ADD: IN SERVICE- TASK 10		-	-	-	-	-	-	-	-	-	-	-	-
MARNE CONNECTOR AGREEMENT			(130,526)					(47,770)	(9,365)				(187,661)
SADDLEBACK SEWER					77,172	4,287							81,459
TASK 11/16/21- CSO ACC DEP			(47,066,346)										(47,066,346)
LIFT STATIONS / CHAMBERS:													
FULLER-BROOKVIEW	\$ 606,434		(277,262)	-	-	-	277,262	-	-	-	-	-	-
FULTON- MIDDLEBORROW	37,253		(36,688)	-	-	-	36,688	-	-	-	-	-	-
WEALTHY ST EXT. CHAMBER	124,529		(26,093)	24,573	-	-	-	1,520	-	-	-	-	-
WEALTHY	20,444		(12,401)	12,084	-	-	-	36	281	-	-	-	-
MARKET	4,724,856		(861,294)	697,625	-	-	140,186	10,631	12,852	-	-	-	-
VANPORTFLIET / LEONARD HTS	131,192		26,379	(26,379)	-	-	-	-	-	-	-	-	-
REMEMBRANCE / 3 MILE	375,850		-	(43,790)	-	-	-	4,942	38,848	-	-	-	-
16th AVENUE	45,646												
HAYES- WEST	70,518		-	-	-	-	-	(70,518)	70,518	-	-	-	-
HAYES- EAST	79,139		-	-	-	-	-	-	-	-	-	-	-
O'BRIEN	235,009		7,053	(20,472)	-	-	-	13,419	-	-	-	-	-
SERVICEMAINS			(4,335,113)	1,248,035	(278,701)	977,258	792,149	10,529	185,798	238,896	728,494	432,655	-
ADJUSTED BY ZONEGATING		\$ 102,281,290	\$ 47,551,787	\$16,429,284	\$13,046,186	\$ 8,352,692	\$ 7,934,442	\$ 1,202,612	\$ 363,371	\$ 238,896	\$ 728,494	\$ 432,655	\$198,561,709
ZONEGATING ADJUSTMENT		\$ -	\$ (994,726)	\$ 2,186,133	\$ 1,476,629	\$ 1,129,863	\$ 1,364,124	\$ 88,692	\$ 308,297	\$ 238,896	\$ 728,494	\$ 432,655	\$ 6,959,057
PHYSICAL LOCATION		\$ 102,281,290	\$ 48,546,513	\$14,243,151	\$11,569,557	\$ 7,222,829	\$ 6,570,318	\$ 1,113,920	\$ 55,074	\$ -	\$ -	\$ -	\$191,602,652

CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
CONTRIBUTIONS & AMORTIZED CONTRIBUTIONS- TASK NO. 21- PART3
FISCAL YEAR ENDED JUNE 30, 2013

CONTRIBUTIONS BY OTHERS

COST CENTER	AMOUNT	INTEGRATED SYSTEM	RETAIL							WHOLESALE			TOTAL
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR	ADA TOWNSHIP	GAINES TOWNSHIP	
2012 RATE STUDY (LOCATION)		\$ 47,596,435	\$ 52,744,450	\$ 22,991,822	\$22,912,579	\$ 16,592,805	\$ 13,696,694	\$ 4,560,073	\$ -	\$ -	\$ -	\$ -	\$181,094,858
ADDITIONS:													
CONNECTION & FRONT FOOT FEES			19,316	-	-	-	24,593	-	-	-	-	-	43,909
FIXED ASSET CONTRIBUTIONS		38,186	1,166,746	-	294,007	-	429,710	-	-	-	-	-	1,928,649
		<u>\$ 47,634,621</u>	<u>\$ 53,930,512</u>	<u>\$ 22,991,822</u>	<u>\$23,206,586</u>	<u>\$ 16,592,805</u>	<u>\$ 14,150,997</u>	<u>\$ 4,560,073</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$183,067,416</u>
PLASTER CREEK INTERCEPTOR													
GRANT	\$ 2,244,621		-	-	1,393,618	311,845	115,216	-	-	-	193,621	60,313	
INTERCEPTOR	1,314,819		-	-	-	-	-	-	-	-	-	712,566	
LIFT STATION	70,753			10,447	-	-	2,099	159	192	-	-	-	
ADJUSTED BY ZONEGATING		<u>\$ 47,634,621</u>	<u>\$ 53,930,512</u>	<u>\$ 23,002,269</u>	<u>\$24,600,204</u>	<u>\$ 16,904,650</u>	<u>\$ 14,268,312</u>	<u>\$ 4,560,232</u>	<u>\$ 192</u>	<u>\$ -</u>	<u>\$ 193,621</u>	<u>\$ 772,879</u>	<u>\$183,067,416</u>
ZONEGATING ADJUSTMENT		<u>\$ -</u>	<u>\$ -</u>	<u>\$ 10,447</u>	<u>\$ 1,393,618</u>	<u>\$ 311,845</u>	<u>\$ 117,315</u>	<u>\$ 159</u>	<u>\$ 192</u>	<u>\$ -</u>	<u>\$ 193,621</u>	<u>\$ 772,879</u>	<u>\$ -</u>
PHYSICAL LOCATION		<u>\$ 47,634,621</u>	<u>\$ 53,930,512</u>	<u>\$ 22,991,822</u>	<u>\$23,206,586</u>	<u>\$ 16,592,805</u>	<u>\$ 14,150,997</u>	<u>\$ 4,560,073</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$183,067,416</u>

AMORTIZED CONTRIBUTIONS

2012 RATE STUDY (LOCATION)		\$ 41,127,065	\$ 41,900,387	\$ 9,585,349	\$10,356,050	\$ 6,589,044	\$ 5,308,158	\$ 887,854	\$ -	\$ -	\$ -	\$ -	\$115,753,907
CURRENT YEAR ADJUSTMENT		955,074	1,073,196	426,805	459,096	331,856	275,258	91,247	-	-	-	-	3,612,532
		<u>\$ 42,082,139</u>	<u>\$ 42,973,583</u>	<u>\$ 10,012,154</u>	<u>\$10,815,146</u>	<u>\$ 6,920,900</u>	<u>\$ 5,583,416</u>	<u>\$ 979,101</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$119,366,439</u>
PLASTER CREEK INTERCEPTOR													
GRANT	\$ 1,256,988		-	-	780,426	174,633	64,521	-	-	-	108,428	33,775	
INTERCEPTOR	604,817		-	-	-	-	-	-	-	-	-	327,781	
LIFT STATION	70,753		-	10,447	-	-	2,099	159	192	-	-	-	
ADJUSTED BY ZONEGATING		<u>\$ 42,082,139</u>	<u>\$ 42,973,583</u>	<u>\$ 10,022,601</u>	<u>\$11,595,572</u>	<u>\$ 7,095,533</u>	<u>\$ 5,650,036</u>	<u>\$ 979,260</u>	<u>\$ 192</u>	<u>\$ -</u>	<u>\$ 108,428</u>	<u>\$ 361,556</u>	<u>\$119,366,439</u>
ZONEGATING ADJUSTMENT		<u>\$ -</u>	<u>\$ -</u>	<u>\$ 10,447</u>	<u>\$ 780,426</u>	<u>\$ 174,633</u>	<u>\$ 66,620</u>	<u>\$ 159</u>	<u>\$ 192</u>	<u>\$ -</u>	<u>\$ 108,428</u>	<u>\$ 361,556</u>	<u>\$ -</u>
PHYSICAL LOCATION		<u>\$ 42,082,139</u>	<u>\$ 42,973,583</u>	<u>\$ 10,012,154</u>	<u>\$10,815,146</u>	<u>\$ 6,920,900</u>	<u>\$ 5,583,416</u>	<u>\$ 979,101</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$119,366,439</u>

CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
RECONCILIATION OF CONSTRUCTION COST & ACCUMULATED DEPRECIATION- PHYSICAL LOCATION & ZONEGATING
FISCAL YEAR ENDED JUNE 30, 2013

		RETAIL								WHOLESALE			
COST CENTER	AMOUNT	INTEGRATED SYSTEM	CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR	ADA TOWNSHIP	GAINES TOWNSHIP	TOTAL
CONSTRUCTION COST- BY PHYSICAL LOCATION:													
BY PHYSICAL LOCATION- TASK 11		\$ 159,857,139	\$ 375,866,372	\$ 38,924,702	\$ 40,677,070	\$ 19,856,940	\$ 17,656,529	\$ 5,661,019	\$ 125,288	\$ -	\$ -	\$ -	\$ 658,625,059
IN SERVICE- TASK 10		1,610,480	3,720,827	103,656	-	-	-	-	-	-	-	-	5,434,963
MARNE CONNECTOR AGREEMENT		-	(211,573)	-	-	-	-	(515,311)	(78,116)	-	-	-	(805,000)
SADDLEBACK SEWER			(1,187,160)		1,115,707	71,453							-
TASK 11/16/21- CSO COST			(187,363,456)										(187,363,456)
O'BRIEN			(546,532)	546,532									-
VANPORTFLIET / LEONARD HTS			(1,239,326)	1,239,326									-
REMEMBRANCE / 3 MILE			(1,213,244)	1,213,244									-
16th AVENUE			(71,058)						71,058				-
HAYES- WEST			(141,105)					141,105					-
HAYES- EAST			(215,841)					215,841					-
KINGSBURY	\$ 323,154		(323,154)	323,154									-
MEADOWWOOD TRAILS	66,841		(66,841)			66,841							-
OAK HOLLOW	66,840		(66,840)				66,840						-
COLLINDALE	66,840		(66,840)	66,840									-
THORNAPPLE	224,216		(224,216)			224,216							-
6000 28TH ST	111,401		(111,401)			111,401							-
THORNHILLS	118,407		(118,407)			118,407							-
ROBINHOOD	178,399		(178,399)				178,399						-
CASCADE SPRINGS	65,478		(65,478)			65,478							-
SHOREHAVEN	72,602		(72,602)				72,602						-
EAGLECREST	152,332		(152,332)				152,332						-
GREENBRIER	48,486		(48,486)				48,486						-
LINCOLN SCHOOL	153,651		(153,651)				153,651						-
REEDS LAKE	962,898		(962,898)				962,898						-
KRAFT	72,602		(72,602)			72,602							-
ORCHARD VISTA	39,712		(39,712)			39,712							-
BIRD AVE-ALPINE ESTATES	797,860		(797,860)				797,860						-
EAST PARIS	323,478		(323,478)				323,478						-
SERVICE MAINS													
LESS: SERVICE MAINS- TOTAL SUBS- PHY. LOC.			(22,308,498)	(13,840,328)	(19,707,869)	(2,312,401)	(140,457)	(590,665)	-	-	-	-	(58,900,218)
ADD: SERVICE MAINS- TOTAL ADDS- PHY. LOC.			10,317,168	12,169,017	8,643,873	175,806	173	-	-	-	-	-	31,306,037
TOTAL- PHYSICAL LOCATION COST		\$ 161,467,619	\$ 171,561,377	\$ 40,746,143	\$ 30,728,781	\$ 18,490,455	\$ 20,272,791	\$ 4,911,989	\$ 118,230	\$ -	\$ -	\$ -	\$ 448,297,385
CONSTRUCTION COST- ZONEGATING:													
LIFT STATIONS / CHAMBERS:													
FULLER-BROOKVIEW	\$ 1,252,893		(572,823)	-	-	-	572,823	-	-	-	-	-	-
FULTON- MIDDLEBORROW	37,983		(37,407)		-	-	37,407		-	-	-	-	-
WEALTHY ST EXT. CHAMBER	458,953		(96,169)	90,565	-	-	-	5,604	-	-	-	-	-
WEALTHY	20,444		(12,401)	12,084	-	-	-	36	281	-	-	-	-
MARKET	12,965,095		(2,363,406)	1,914,296	-	-	384,674	29,171	35,265	-	-	-	-
VANPORTFLIET / LEONARD HTS	1,239,326		249,191	(249,191)	-	-	-	-	-	-	-	-	-
REMEMBRANCE / 3 MILE	1,213,244		-	(141,355)	-	-	-	15,954	125,401	-	-	-	-
16th AVENUE	71,058		-	-	-	-	-	-	-	-	-	-	-
HAYES- WEST	141,105		-	-	-	-	-	(141,105)	141,105	-	-	-	-
HAYES- EAST	215,841		-	-	-	-	-	-	-	-	-	-	-
O'BRIEN	546,532		16,401	(47,608)	-	-	-	31,207	-	-	-	-	-
SERVICEMAINS- ZONEGATED COST			850,531	6,754,597	2,825,570	4,653,101	4,371,199	812,546	1,041,138	252,987	5,172,448	860,064	27,594,181
TOTAL- ZONEGATED COST		\$ -	\$ (1,966,083)	\$ 8,333,388	\$ 2,825,570	\$ 4,653,101	\$ 5,366,103	\$ 753,413	\$ 1,343,190	\$ 252,987	\$ 5,172,448	\$ 860,064	\$ 27,594,181
GRAND TOTAL- COST		\$ 161,467,619	\$ 169,595,294	\$ 49,079,531	\$ 33,554,351	\$ 23,143,556	\$ 25,638,894	\$ 5,665,402	\$ 1,461,420	\$ 252,987	\$ 5,172,448	\$ 860,064	\$ 475,891,566

CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
RECONCILIATION OF CONSTRUCTION COST & ACCUMULATED DEPRECIATION- PHYSICAL LOCATION & ZONEGATING
FISCAL YEAR ENDED JUNE 30, 2013

COST CENTER	AMOUNT	INTEGRATED SYSTEM	CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	RETAIL	GR TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP	WHOLESALE			TOTAL
						CITY OF EAST GR				ADA TOWNSHIP	GAINES TOWNSHIP		
ACCUMULATED DEPRECIATION- BY PHYSICAL LOCATION:													
BY PHYSICAL LOCATION- TASK 11		\$ 102,281,290	\$ 101,884,615	\$ 13,724,753	\$ 13,247,715	\$ 7,195,499	\$ 6,251,426	\$ 1,130,166	\$ 18,793	\$ -	\$ -	\$ -	\$ 245,734,257
IN SERVICE- TASK 10		-	-	-	-	-	-	-	-	-	-	-	-
MARNE CONNECTOR AGREEMENT		-	(130,526)	-	-	-	-	(47,770)	(9,365)	-	-	-	(187,661)
SADDLEBACK SEWER					77,172	4,287							81,459
TASK 11/16/21- CSO ACC. DEPRECIATION			(47,066,346)										(47,066,346)
O'BRIEN			(235,009)	235,009									-
VANPORTFLIET			(131,192)	131,192									-
REMEMBRANCE / 3 MILE			(375,850)	375,850									-
16th AVENUE			(45,646)						45,646				-
HAYES- WEST			(70,518)					70,518					-
HAYES- EAST			(79,139)					79,139					-
KINGSBURY	\$ 64,120		(64,120)	64,120									-
MEADOWOOD TRAILS	6,684		(6,684)			6,684							-
OAK HOLLOW	6,684		(6,684)				6,684						-
COLINDALE	6,684		(6,684)	6,684									-
THORNAPPLE	76,315		(76,315)			76,315							-
6000 28TH ST	14,853		(14,853)			14,853							-
THORNHIL LS	23,681		(23,681)			23,681							-
ROBINHOOD	41,626		(41,626)				41,626						-
CASCADE SPRINGS	30,556		(30,556)			30,556							-
SHOREHAVEN	16,940		(16,940)				16,940						-
EAGLECREST	30,466		(30,466)				30,466						-
GREENBRIER	8,081		(8,081)				8,081						-
LINCOLN SCHOOL	21,895		(21,895)				21,895						-
REEDS LAKE	124,893		(124,893)				124,893						-
KRAFT	16,940		(16,940)			16,940							-
ORCHARD VISTA	6,619		(6,619)			6,619							-
BIRD AVE-ALPINE ESTATES	89,103		(89,103)				89,103						-
EAST PARIS	97,043		(97,043)				97,043						-
SERVICE MAINS													-
LESS: SERVICE MAINS- TOTAL SUBS- PHY. LOC.			(9,450,208)	(2,446,471)	(3,180,886)	(234,275)	(117,984)	(118,133)	-	-	-	-	(15,547,957)
ADD: SERVICE MAINS- TOTAL ADDS- PHY. LOC.			4,929,516	2,152,014	1,425,556	81,671	145	-	-	-	-	-	8,588,902
		<u>\$ 102,281,290</u>	<u>\$ 48,546,514</u>	<u>\$ 14,243,151</u>	<u>\$ 11,569,557</u>	<u>\$ 7,222,830</u>	<u>\$ 6,570,318</u>	<u>\$ 1,113,920</u>	<u>\$ 55,074</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 191,602,654</u>
ACCUMULATED DEPRECIATION- ZONEGATED													
LIFT STATIONS / CHAMBERS:													
FULLER-BROOKVIEW	\$ 606,434		(277,262)	-	-	-	277,262	-	-	-	-	-	-
FULTON- MIDDLEBORROW	37,253		(36,688)	-	-	-	36,688	-	-	-	-	-	-
WEALTHY ST EXT. CHAMBER	124,529		(26,093)	24,573	-	-	-	1,520	-	-	-	-	-
WEALTHY	20,444		(12,401)	12,084	-	-	-	36	281	-	-	-	-
MARKET	4,724,856		(861,294)	697,625	-	-	140,186	10,631	12,852	-	-	-	-
VANPORTFLIET	131,192		26,379	(26,379)	-	-	-	-	-	-	-	-	-
REMEMBRANCE / 3 MILE	375,850		-	(43,790)	-	-	-	4,942	38,848	-	-	-	-
16th AVENUE	45,646		-	-	-	-	-	-	-	-	-	-	-
HAYES- WEST	70,518		-	-	-	-	-	(70,518)	70,518	-	-	-	-
HAYES- EAST	79,139		-	-	-	-	-	-	-	-	-	-	-
O'BRIEN	235,009		7,053	(20,472)	-	-	-	13,419	-	-	-	-	-
SERVICEMAINS-ZONEGATED ACC. DEPRECIATION			185,580	1,542,492	1,476,629	1,129,863	909,988	128,662	185,798	238,896	728,494	432,655	6,959,057
TOTAL- ZONEGATED ACC. DEPRECIATION	\$ -		\$ (994,726)	\$ 2,186,133	\$ 1,476,629	\$ 1,129,863	\$ 1,364,124	\$ 88,692	\$ 308,297	\$ 238,896	\$ 728,494	\$ 432,655	\$ 6,959,057
GRAND TOTAL- ACC. DEPRECIATION	<u>\$ 102,281,290</u>		<u>\$ 47,551,788</u>	<u>\$ 16,429,284</u>	<u>\$ 13,046,186</u>	<u>\$ 8,352,693</u>	<u>\$ 7,934,442</u>	<u>\$ 1,202,612</u>	<u>\$ 363,371</u>	<u>\$ 238,896</u>	<u>\$ 728,494</u>	<u>\$ 432,655</u>	<u>\$ 198,561,711</u>

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CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ADJUSTED OPERATING EXPENSE ZONEGATING ALLOCATION BY GOVERNMENTAL UNIT - TASK #22
FISCAL YEAR ENDED JUNE 30, 2013

COST CENTER	ADJUSTED EXPENSE BY COST CENTER	INTEGRATED SYSTEM	RETAIL							WHOLESALE		
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR	ADA TOWNSHIP	GAINES TOWNSHIP
WASTEWATER TREATMENT	\$ 13,924,033	\$ 13,924,033										
LIFT STATIONS:												
A. INTERCEPTOR	259,244		211,987	38,277	-	-	7,692	583	705	-	-	-
B. TRUNK	113,588		28,701	59,208	-	17,790	5,797	2,092	-	-	-	-
C. LOCAL COLLECTOR	406,985		57,360	63,648	-	80,400	151,852	21,945	18,450	-	13,330	-
SEWER LINES:												
A. INTERCEPTOR	276,639		165,341	39,521	64,684	7,093	-	-	-	-	-	-
B. TRUNK	591,598		201,150	152,644	139,037	50,156	31,739	16,186	686	-	-	-
C. LOCAL COLLECTOR	4,317,122		2,705,756	532,474	421,006	255,833	328,403	47,920	25,730	-	-	-
D. ZONEGATING			(125,541)	27,053	(22,363)	34,717	39,063	(10,123)	16,586	10,695	20,819	9,094
BULK METERING STATIONS	10,685		-	-	3,228	-	-	-	-	2,641	2,431	2,385
CUSTOMER ACCOUNTING *	2,559,086		2,013,464	192,008	154,185	61,213	125,523	4,734	7,959			
INDUSTRIAL PRETREATMENT	643,490	643,490										
SUBTOTAL OPERATING EXPENSE	23,102,470	14,567,523	5,258,218	1,104,833	759,777	507,202	690,069	83,337	70,116	13,336	36,580	11,479
ADMINISTRATIVE EXPENSE	1,624,251	1,024,190	369,686	77,677	53,417	35,659	48,516	5,859	4,930	938	2,572	807
TOTAL	\$ 24,726,721	\$ 15,591,713	\$ 5,627,904	\$ 1,182,510	\$ 813,194	\$ 542,861	\$ 738,585	\$ 89,196	\$ 75,046	\$ 14,274	\$ 39,152	\$ 12,286

* Reflects adjustment for circuit breaker provisions per the third amendment to W/S service agreements.

METHOD OF DISTRIBUTION

WASTEWATER TREATMENT	100.000%	100.00%										
LIFT STATIONS:	(53)											
A. INTERCEPTORS	(1)	100.000%	(1)	-	-	-	-	-	-	-	-	-
B. TRUNK	(7)	100.000%	(3)	(3)	-	(1)	-	-	-	-	-	-
C. LOCAL	(45)	100.000%	(9)	(3)	-	(9)	(17)	(5)	(1)	-	(1)	-
SEWER LINES:												
TOTAL MILES:	906.63											
A. INTERCEPTOR		100.000%	59.768%	14.286%	23.382%	2.564%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
MILES	48.37		28.91	6.91	11.31	1.24	-	-	-	-	-	-
B. TRUNK LINES		100.000%	34.001%	25.802%	23.502%	8.478%	5.365%	2.736%	0.116%	0.000%	0.000%	0.000%
MILES	103.44		35.17	26.69	24.31	8.77	5.55	2.83	0.12	-	-	-
C. LOCAL COLLECTOR		100.000%	62.675%	12.334%	9.752%	5.926%	7.607%	1.110%	0.596%	0.000%	0.000%	0.000%
MILES	754.82		473.08	93.10	73.61	44.73	57.42	8.38	4.50	-	-	-
D. ZONEGATING												
MILES			(21.95)	4.73	(3.91)	6.07	6.83	(1.77)	2.90	1.87	3.64	1.59
BULK METERING STATIONS	(4)		-	-	(1)	-	-	-	-	(1)	(1)	(1)
CUSTOMER ACCTG (1)		100.000%	78.679%	7.503%	6.025%	2.392%	4.905%	0.185%	0.311%			
NO. OF METERS	74,053.00		58,265.00	5,556.00	4,462.00	1,771.00	3,632.00	137.00	230.00			
INDUSTRIAL PRETREATMENT		100.000%										
ADMINISTRATIVE EXPENSE (2)		100.000%	63.056%	22.760%	4.782%	3.289%	2.195%	2.987%	0.361%	0.304%	0.058%	0.050%

NOTES:

(1) MAINTENANCE & COLLECTION COSTS ARE ALLOCATED ON THE NUMBER OF METERS, INCLUSIVE OF USERS FOR WRIGHT TWP.

(2) ALLOCATED ON DIRECT OPERATING EXPENSE, ADJUSTED FOR ANY COST ASSIGNABLE EXCLUSIVELY TO GR OR RETAIL COMMUNITIES, IF APPLICABLE.

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 23**

ASSIGN OTHER OPERATING REVENUES TO EACH GOVERNMENTAL ENTITY.

BASIS OF ALLOCATION: RETAIL BILLINGS BY GOVERNMENTAL ENTITY - TASK NO. 6 & 7

	RETAIL BILLINGS	PERCENTAGE OF TOTAL	ALLOCATION
CITY OF GRAND RAPIDS	\$ 31,158,246	70.7570%	\$ 105,776
CITY OF WALKER	4,418,885	10.0348%	15,001
CITY OF KENTWOOD	3,640,576	8.2673%	12,359
CASCADE TOWNSHIP	1,986,934	4.5121%	6,745
GRAND RAPIDS TOWNSHIP	2,345,611	5.3266%	7,963
TALLMADGE TOWNSHIP	251,198	0.5704%	853
WRIGHT TOWNSHIP	234,190	0.5318%	795
	<u>\$ 44,035,640</u>	<u>100.0000%</u>	<u>\$ 149,492</u>

CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ASSIGN DEPRECIATION EXPENSE TO CUSTOMER COMMUNITIES- TASK NO. 24
FISCAL YEAR ENDED JUNE 30, 2013

COST CENTER	DEPRECIATION EXPENSE	INTEGRATED SYSTEM	RETAIL							WHOLESALE			TOTAL
			CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR	ADA TOWNSHIP	GAINES TOWNSHIP	
BY PHYSICAL LOCATION- TASK 11		\$ 3,204,787	\$ 7,456,383	\$ 900,002	\$ 810,466	\$ 420,428	\$ 392,779	\$ 113,220	\$ 2,506	\$ -	\$ -	\$ -	\$ 13,300,571
ADD: IN SERVICE- TASK 10		107,365	74,417	2,073	-	-	-	-	-	-	-	-	183,855
MARNE CONNECTOR AGREEMENT			(12,959)					(10,307)	(1,563)				(24,829)
SADDLEBACK SEWER					22,313	1,429							23,742
LESS: TASK 11/16/21- CSO DEP. EXP.			(3,781,238)										(3,781,238)
LIFT STATIONS / CHAMBERS:													
FULLER-BROOKVIEW (GR)	\$ 46,649		(21,328)	-	-	-	21,328	-	-	-	-	-	-
FULTON- MIDDLEBORO (GR)	183		(180)	-	-	-	180	-	-	-	-	-	-
WEALTHY ST EXT. CHAMBER	11,321		(2,372)	2,234	-	-	-	138	-	-	-	-	-
WEALTHY	-		-	-	-	-	-	-	-	-	-	-	-
MARKET	500,258		(91,193)	73,863	-	-	14,843	1,126	1,361	-	-	-	-
VANPORTFLIET	34,991		7,036	(7,036)	-	-	-	-	-	-	-	-	-
REMEMBRANCE / 3 MILE	62,642		-	(7,299)	-	-	-	824	6,475	-	-	-	-
O'BRIEN	15,667		470	(1,365)	-	-	-	895	-	-	-	-	-
KINGSBURY	10,772												
MEADOWWOOD TRAILS	2,228												
OAK HOLLOW	2,228												
COLLINDALE	2,228												
THORNAPPLE	7,474												
6000 28TH ST	3,713												
THORNHILLS	3,947												
ROBINHOOD	5,947												
CASCADE SPRINGS	2,183												
SHOREHAVEN	2,420												
EAGLECREST	5,078												
GREENBRIER	1,616												
LINCOLN SCHOOL	5,121												
REEDS LAKE	24,979												
KRAFT	2,420												
ORCHARD VISTA	1,324												
16TH AVE	4,565		(4,565)	-	-	-	-	-	4,565	-	-	-	-
HAYES- WEST	7,052		(7,052)	-	-	-	-	-	7,052	-	-	-	-
HAYES- EAST	9,893		(9,893)	-	-	-	-	9,893	-	-	-	-	-
BIRD AVE-ALPINE ESTATES	23,258		(23,258)				23,258						
EAST PARIS	10,783		(10,783)				10,783						
SERVICEMAINS			(201,160)	92,330	(169,947)	49,169	82,132	4,401	20,651	2,719	102,728	16,977	-
ADJUSTED BY ZONEGATING		3,312,152	3,372,325	1,054,802	662,832	471,026	545,303	120,190	41,047	2,719	102,728	16,977	9,702,101
LESS CONTRIBUTIONS AMORTIZED													
TASK NO. 21		(955,074)	(1,073,196)	(426,805)	(444,845)	(331,856)	(275,258)	(91,247)	-	-	-	(14,251)	(3,612,532)
TOTAL		\$ 2,357,078	\$ 2,299,129	\$ 627,997	\$ 217,987	\$ 139,170	\$ 270,045	\$ 28,943	\$ 41,047	\$ 2,719	\$ 102,728	\$ 2,726	\$ 6,089,569

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**CITY OF GRAND RAPIDS, MICHIGAN
SEWAGE DISPOSAL SYSTEM FUND
ACCUMULATE REVENUE REQUIREMENTS BY CUSTOMER COMMUNITIES- TASK NO. 25
FISCAL YEAR ENDED JUNE 30, 2013**

COST CENTER	INTEGRATED SYSTEM	RETAIL							WHOLESALE			TOTAL
		CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR	ADA TOWNSHIP	GAINES TOWNSHIP	
OPERATION & MAINTENANCE												
EXPENSE- TASK NO. 22	\$ 15,591,713	\$ 5,627,904	\$ 1,182,510	\$ 813,194	\$ 542,861	\$ 738,585	\$ 89,196	\$ 75,046	\$ 14,274	\$ 39,152	\$ 12,286	\$ 24,726,721
DEPRECIATION EXPENSE												
TASK NO. 24	2,357,078	2,299,129	627,997	217,987	139,170	270,045	28,943	41,047	2,719	102,728	2,726	6,089,569
RETURN ON SYSTEM INVESTMENT												
TASK NO. 21	2,829,819	5,448,761	1,196,474	403,214	372,749	595,683	68,252	91,988	1,399	370,568	958	11,379,865
REVENUE CREDITS- TASK NO. 23		(105,776)	(15,001)	(12,359)	(6,745)	(7,963)	(853)	(795)				(149,492)
CSO DEBT SERVICE REQUIREMENTS		9,420,985										9,420,985
ALLOCATE:												
INTEGRATED SYSTEM CREDITS		(1,428,952)	(227,373)	(310,176)	(133,038)	(103,449)	(12,044)	(6,683)	(85,590)	(80,433)	-	(2,387,738)
INTEGRATED SYSTEM (A)	(20,778,610)	12,355,031	1,965,912	2,681,842	1,150,269	894,445	104,131	57,783	740,027	695,439	133,731	-
LESS: CIRCUIT BREAKER (B)		-	-	(97,609)	(5,651)	(14,861)	(11,000)	(4,577)				(133,698)
	<u>\$ -</u>	<u>\$ 33,617,082</u>	<u>\$ 4,730,519</u>	<u>\$ 3,696,093</u>	<u>\$ 2,059,615</u>	<u>\$ 2,372,485</u>	<u>\$ 266,625</u>	<u>\$ 253,809</u>	<u>\$ 672,829</u>	<u>\$ 1,127,454</u>	<u>\$ 149,701</u>	<u>\$ 48,946,212</u>

(A) ALLOCATED TO CUSTOMER COMMUNITIES UNDER OLD CONTRACT BASIS OF PLANT FLOW. REMAINING ALLOCATION TO UAB PARTNERS UNDER UNIFORM SERVICE AGREEMENTS BASED ON PLANT FLOW & LAND, AS NOTED BELOW:
(B) PURSUANT TO CITY AND CUSTOMER COMMUNITY CIRCUIT BREAKER, AS PROVIDED FOR BY THE THIRD AMENDMENT TO THE UNIFORM SERVICE AGREEMENTS.

	CITY OF GR	CITY OF WALKER	CITY OF KENTWOOD	CASCADE TOWNSHIP	GR TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP	CITY OF EAST GR	ADA TOWNSHIP	GAINES TOWNSHIP	TOTAL
OLD METHOD- PLANT FLOW	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 133,731	\$ 133,731
NEW METHOD- PLANT FLOW / LAND	12,355,031	1,965,912	2,681,842	1,150,269	894,445	104,131	57,783	740,027	695,439	-	20,644,879
	<u>\$ 12,355,031</u>	<u>\$ 1,965,912</u>	<u>\$ 2,681,842</u>	<u>\$ 1,150,269</u>	<u>\$ 894,445</u>	<u>\$ 104,131</u>	<u>\$ 57,783</u>	<u>\$ 740,027</u>	<u>\$ 695,439</u>	<u>\$ 133,731</u>	<u>\$ 20,778,610</u>

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWER SUPPLY SYSTEM FUND
TASK NO. 25a**

REVIEW THE REVENUE REQUIREMENTS TO ASSURE COMPLIANCE WITH THE APPLICABLE BOND ORDINANCE PROVISIONS.

	YEAR ENDED 6/30/13	PRO FORMA *
REVENUES:		
RETAIL/WHOLESALE SEWAGE SERVICE	\$ 45,970,014	\$ 46,603,816
CONNECTION FEES/FRONT FOOT FEES	826,015	705,000
SEWAGE SURCHARGES	1,605,632	2,370,900
OTHER OPERATING REVENUES	142,469	855,600
INTEREST ON INVESTMENTS	187,867	120,000
MISCELLANEOUS	726,759	20,000
TOTAL REVENUES	<u>\$ 49,458,756</u>	<u>\$ 50,675,316</u>
OPERATING EXPENSES:		
OPERATIONS & MAINTENANCE	\$ 24,784,036	\$ 25,510,815
DEPRECIATION	13,300,710	13,300,710
TOTAL EXPENSES	<u>\$ 38,084,746</u>	<u>\$ 38,811,525</u>
ADDITIONS: DEPRECIATION	<u>13,300,710</u>	<u>13,300,710</u>
NET EARNINGS OF THE SYSTEM	<u>\$ 24,674,720</u>	<u>\$ 25,164,500</u>
DEBT SERVICE (CASH BASIS)		
SERIES 2013 BONDS	\$ -	\$ 1,537,188
SERIES 2012 BONDS	297,326	2,161,450
SERIES 2010A&B BONDS (after BAB subsidy)	1,254,920	1,277,483
SERIES 2010 BONDS	1,481,250	1,481,250
SERIES 2008 BONDS	4,395,238	4,393,863
SERIES 2005 BONDS	2,953,006	2,954,881
SERIES 2004 BONDS	1,992,738	224,850
SERIES 1998 BONDS	4,400,025	4,405,813
SENIOR LIEN	<u>16,774,503</u>	<u>18,436,778</u>
JUNIOR LIEN **	3,902,242	4,127,903
TOTAL	<u>\$ 20,676,745</u>	<u>\$ 22,564,681</u>
COVERAGE RATIO - SENIOR DEBT	<u>1.47</u>	<u>1.36</u>
COVERAGE RATIO - ALL DEBT	<u>1.19</u>	<u>1.12</u>

* SEWAGE SERVICES ADJUSTED FOR RATE REVISIONS OF -2.46% AND 2.46% EFFECTIVE 1/1/13 AND 1/1/14, RESPECTIVELY; OTHER REVENUES AND OPERATIONS & MAINTENANCE EXPENSE PER 2014 FISCAL PLAN, ADJUSTED FOR CARRYFORWARDS.

** AMOUNTS IN PRO FORMA ARE BASED ON MAXIMUM PRINCIPAL AND DO NOT INCLUDE PRINCIPAL FORGIVENESS.

SUMMARY

**SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26**

INITIAL SYSTEM REVENUE REQUIREMENTS		\$ 49,079,910
REVENUES FROM CURRENT RATES		
REU CHARGE	\$ 247,040	
MONTHLY METER CHARGE	13,447,127	
MONTHLY BILLING CHARGE	3,379,591	
COMMODITY CHARGE	<u>30,695,052</u>	<u>(47,768,810)</u>
INITIAL REQUIRED REVENUE INCREASE (DECREASE)		<u>\$ 1,311,100</u>
INITIAL PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		<u>2.74%</u>
INITIAL SYSTEM REVENUE REQUIREMENTS FROM ABOVE		\$ 49,079,910
LESS: AMOUNT OF CIRCUIT BREAKER RELIEF TO REDUCE RR's TO RETAIL		<u>(133,698)</u>
SYSTEM REVENUE REQUIREMENTS		<u>\$ 48,946,212</u>
ACTUAL REQUIRED AMOUNT OF REVENUE INCREASE (DECREASE)		<u>\$ 1,177,402</u>
ACTUAL PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		<u>2.46%</u>

**SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 26**

METER SIZE		EQUIV. FACTOR	CITY OF GR		CITY OF WALKER		CITY OF KENTWOOD		CASCADE TWP		GR TWP		TALLMADGE TWP		WRIGHT TWP	
			METERS *	EQUIV.	METERS *	EQUIV.	METERS *	EQUIV.	METERS *	EQUIV.	METERS *	EQUIV.	METERS *	EQUIV.	USERS*	REU
A	3/4" or less	1.0000	54,336	54,336	4,972	4,972	3,464	3,464	1,346	1,346	3,280	3,280	114	114		-
B	1"	1.7778	2,212	3,932	345	613	466	828	215	382	235	418	14	25	-	-
C	1 1/4"	2.7778	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D	1 1/2"	4.0000	855	3,420	142	568	309	1,236	141	564	75	300	3	12	-	-
E	2"	7.1111	673	4,786	78	555	188	1,337	60	427	32	228	3	21	-	-
F	3"	16.0000	91	1,456	8	128	17	272	6	96	6	96	2	32	-	-
G	4"	28.4444	84	2,389	9	256	15	427	3	85	3	85	1	28	-	-
H	6" and over	64.0000	14	896	2	128	3	192	-	-	1	64	-	-	-	-
<i>Other- Wright Twp</i>			<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	230	332.687
			58,265	71,215	5,556	7,220	4,462	7,756	1,771	2,900	3,632	4,471	137	232	230	332.687
TOTAL															<u>74,053</u>	

* Source: City of Grand Rapids Water/Sewer Customer Accounts/Meters Report, October 31, 2013.

CITY OF GRAND RAPIDS, MICHIGAN

SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

SYSTEM REVENUE REQUIREMENTS	\$	33,617,082
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REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

71,215 meter equivalents	x	\$ 10.04	x	12 =	\$ 8,579,983
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MONTHLY BILLING CHARGE

58,265 meters	x	\$ 3.15	x	12 =	2,202,417
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COMMODITY CHARGE

6,777,934 units (100 CF)	x	\$ 3.26	=	<u>22,096,065</u>	<u>(32,878,465)</u>
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REQUIRED REVENUE INCREASE (DECREASE)	\$	<u>738,617</u>
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PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES	<u>2.25%</u>
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CITY OF GRAND RAPIDS, MICHIGAN

SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

COMMODITY CHARGE:

$$\frac{\text{INTEGRATED SYSTEM COST}}{\text{BILLED UNITS}} = \frac{\$21,776,016}{6,777,934} = \$ 3.21 /100 \text{ CF}^*$$

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS \$ 33,617,082

NEW COMMODITY CHARGE

6,777,934 x \$ 3.21 \$ 21,757,168

NEW MONTHLY BILLING CHARGE

58,265 x \$ 2.88 x 12 2,013,638 (23,770,806)

\$ 9,846,276

$$\text{MONTHLY METER CHARGE} = \frac{\$9,846,276}{71,215 \times 12} = \$ 11.52 \text{ MONTHLY}$$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 11.52	\$ 2.88	\$ 14.40	\$ 13.19
1"	1.7778	20.48	2.88	23.36	21.00
1 1/4"	2.7778	32.00	2.88	34.88	31.04
1 1/2"	4.0000	46.08	2.88	48.96	43.31
2"	7.1111	81.92	2.88	84.80	74.55
3"	16.0000	184.32	2.88	187.20	163.79
4"	28.4444	327.68	2.88	330.56	288.73
6" and over	64.0000	737.28	2.88	740.16	645.71

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2014

CITY OF WALKER, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

SYSTEM REVENUE REQUIREMENTS \$ 4,730,519

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

7,220 meter equivalents x \$ 25.97 x 12 = \$ 2,250,041

MONTHLY BILLING CHARGE

5,556 meters x \$ 3.15 x 12 = 210,017

COMMODITY CHARGE

825,039 units (100 CF) x \$ 2.62 = 2,161,602 (4,621,660)

REQUIRED REVENUE INCREASE (DECREASE) \$ 108,859

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES 2.36%

CITY OF WALKER, MICHIGAN

SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 2.68 /100 CF *
 \$ 2.62 x 102.36%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS \$ 4,730,519

NEW COMMODITY CHARGE
 825,039 x \$ 2.68 \$ 2,211,105

NEW MONTHLY BILLING CHARGE
 5,556 x \$ 2.88 x 12 192,015 (2,403,120)
\$ 2,327,399

MONTHLY METER CHARGE = $\frac{\$2,327,399}{7,220 \times 12} = \underline{\underline{\$ 26.86 \text{ MONTHLY}}}$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 26.86	\$ 2.88	\$ 29.74	\$ 29.12
1"	1.7778	47.75	2.88	50.63	49.32
1 1/4"	2.7778	74.61	2.88	77.49	75.29
1 1/2"	4.0000	107.44	2.88	110.32	107.03
2"	7.1111	191.00	2.88	193.88	187.83
3"	16.0000	429.76	2.88	432.64	418.67
4"	28.4444	764.02	2.88	766.90	741.85
6" and over	64.0000	1,719.04	2.88	1,721.92	1,665.23

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2014

CITY OF KENTWOOD, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

SYSTEM REVENUE REQUIREMENTS * \$ 3,696,093

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

7,756 meter equivalents x \$ 3.52 x 12 = \$ 327,613

MONTHLY BILLING CHARGE

4,462 meters x \$ 3.15 x 12 = 168,664

COMMODITY CHARGE

1,384,484 units (100 CF) x \$ 2.24 = 3,101,244 (3,597,521)

REQUIRED REVENUE INCREASE (DECREASE)

\$ 98,572

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES

2.74%

* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 97,609

CITY OF KENTWOOD, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

COMMODITY CHARGE:

PRESENT CHARGE	x	RATE ADJUSTMENT		\$	2.30	/100 CF *
\$ 2.24	x	102.74%				

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS **	\$ 3,696,093
--------------------------------	--------------

NEW COMMODITY CHARGE			
1,384,484	x	\$ 2.30	\$ 3,184,313

NEW MONTHLY BILLING CHARGE					
4,462	x	\$ 2.88	x	12	
					<u>154,207</u>
					<u>(3,338,520)</u>
					\$ 357,573

$$\text{MONTHLY METER CHARGE} = \frac{\$357,573}{7,756 \times 12} = \$ 3.84 \text{ MONTHLY}$$

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 3.84	\$ 2.88	\$ 6.72	\$ 6.67
1"	1.7778	6.83	2.88	9.71	9.41
1 1/4"	2.7778	10.67	2.88	13.55	12.93
1 1/2"	4.0000	15.36	2.88	18.24	17.23
2"	7.1111	27.31	2.88	30.19	28.18
3"	16.0000	61.44	2.88	64.32	59.47
4"	28.4444	109.23	2.88	112.11	103.27
6" and over	64.0000	245.76	2.88	248.64	228.43

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2014

** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF	\$	97,609
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CASCADE TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

SYSTEM REVENUE REQUIREMENTS *	\$ 2,059,615
LESS: CASH CONTRIBUTION	-
SYSTEM REVENUE REQUIREMENTS	<u>\$ 2,059,615</u>

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

2,900 meter equivalents x \$ 27.20 x 12 = \$ 946,560

MONTHLY BILLING CHARGE

1,771 meters x \$ 3.15 x 12 = 66,944

COMMODITY CHARGE

396,473 units (100 CF) x \$ 2.50 = 991,183 (2,004,687)

REQUIRED REVENUE INCREASE (DECREASE) \$ 54,928

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES 2.74%

* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 5,651

CASCADE TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

COMMODITY CHARGE:

PRESENT CHARGE x RATE ADJUSTMENT \$ 2.57 /100 CF *
 \$ 2.50 x 102.74%

MONTHLY SERVICE CHARGE:

SYSTEM REVENUE REQUIREMENTS ** \$ 2,059,615

NEW COMMODITY CHARGE
 396,473 x \$ 2.57 \$ 1,018,936

NEW MONTHLY BILLING CHARGE
 1,771 x \$ 2.88 x 12 61,206 (1,080,142)
\$ 979,473

MONTHLY METER CHARGE = $\frac{\$979,473}{2,900 \times 12}$ = \$ 28.15 MONTHLY

METER SIZE	EQUIVALENT	MONTHLY SERVICE CHARGE			PRESENT
		METER	BILLING	TOTAL	
3/4" or less	1.0000	\$ 28.15	\$ 2.88	\$ 31.03	\$ 30.35
1"	1.7778	50.05	2.88	52.93	51.51
1 1/4"	2.7778	78.20	2.88	81.08	78.71
1 1/2"	4.0000	112.60	2.88	115.48	111.95
2"	7.1111	200.18	2.88	203.06	196.57
3"	16.0000	450.40	2.88	453.28	438.35
4"	28.4444	800.71	2.88	803.59	776.84
6" and over	64.0000	1,801.60	2.88	1,804.48	1,743.95

* NEW RATES EFFECTIVE, ON A PRO-RATA BASIS, JANUARY 1, 2014

** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 5,651

GRAND RAPIDS TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

SYSTEM REVENUE REQUIREMENTS *	\$ 2,372,485
LESS: CASH CONTRIBUTION	(3,200)
SYSTEM REVENUE REQUIREMENTS	<u>\$ 2,369,285</u>

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

4,471 meter equivalents x \$ 23.51 x 12 = \$ 1,261,359

MONTHLY BILLING CHARGE

3,632 meters x \$ 3.15 x 12 = 137,290

COMMODITY CHARGE

399,370 units (100 CF) x \$ 2.28 = 910,564 (2,309,213)

REQUIRED REVENUE INCREASE (DECREASE) \$ 60,072

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES 2.60%

* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 14,861

TALLMADGE TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

SYSTEM REVENUE REQUIREMENTS *	\$ 266,625
LESS: CASH CONTRIBUTION	-
SYSTEM REVENUE REQUIREMENTS	<u>\$ 266,625</u>

REVENUES FROM CURRENT RATES

MONTHLY METER CHARGE

232 meter equivalents x \$ 29.30 x 12 = \$ 81,571

MONTHLY BILLING CHARGE

137 meters x \$ 3.15 x 12 = 5,179

COMMODITY CHARGE

16,855 units (100 CF) x \$ 10.25 = 172,764 (259,514)

REQUIRED REVENUE INCREASE (DECREASE) \$ 7,111

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES 2.74%

* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 11,000

WRIGHT TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

SYSTEM REVENUE REQUIREMENTS *	\$ 253,809
LESS: CASH CONTRIBUTION	<u>(10,000)</u>
SYSTEM REVENUE REQUIREMENTS	\$ 243,809

REVENUES FROM CURRENT RATES

REU CHARGE

332.687 meter equivalents x \$ 61.88 x 12 = \$ 247,040

MONTHLY METER CHARGE

332.687 meter equivalents x \$ - x 12 = -

MONTHLY BILLING CHARGE

230 meters x \$ - x 12 = -

COMMODITY CHARGE

18,445 units (100 CF) x \$ - = - (247,040)

REQUIRED REVENUE INCREASE (DECREASE) \$ (3,231)

PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES -1.31%

* REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 4,577

WRIGHT TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

MONTHLY REU CHARGE:

$$\frac{\text{SYSTEM REVENUE REQUIREMENTS **}}{\text{TOTAL REU'S * 12 MONTHS}} = \frac{\$243,809}{332.687 \times 12} = \$ \underline{\underline{61.07}} \quad \text{MONTHLY REU CHARGE *}$$

SYSTEM REVENUE REQUIREMENTS ARE NET OF CONTRIBUTION OF \$ 10,000

EXAMPLES OF APPROXIMATE MONTHLY CHARGE BY NUMBER OF REU:

<u>NUMBER OF REU</u>	<u>AMOUNT</u>	<u>NUMBER OF REU</u>	<u>AMOUNT</u>	<u>NUMBER OF REU</u>	<u>AMOUNT</u>
1.0000	\$ 61.07	7.5000	\$ 458.03	19.0000	\$ 1,160.33
1.5000	91.61	8.0000	488.56	20.0000	1,221.40
2.0000	122.14	8.5000	519.10	25.0000	1,526.75
2.5000	152.68	9.0000	549.63	30.0000	1,832.10
3.0000	183.21	9.5000	580.17	35.0000	2,137.45
3.5000	213.75	10.0000	610.70	40.0000	2,442.80
4.0000	244.28	11.0000	671.77	50.0000	3,053.50
4.4000	268.71	12.0000	732.84	60.0000	3,664.20
4.5000	274.82	13.0000	793.91	70.0000	4,274.90
5.0000	305.35	14.0000	854.98	80.0000	4,885.60
5.5000	335.89	15.0000	916.05	90.0000	5,496.30
6.0000	366.42	16.0000	977.12	100.0000	6,107.00
6.5000	396.96	17.0000	1,038.19	150.0000	9,160.50
7.0000	427.49	18.0000	1,099.26	200.0000	12,214.00

* NEW RATES EFFECTIVE ON JANUARY 1, 2014

** REFLECTS RELIEF FROM CIRCUIT BREAKER, IN THE AMOUNT OF \$ 4,577

CITY OF EAST GRAND RAPIDS, MICHIGAN**SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26**

INTEGRATED SYSTEM REVENUE REQUIREMENTS	\$	654,437
COMMODITY CHARGE		
419.993 units x \$ 1,396.00		586,310
		<hr/>
REQUIRED COMMODITY REVENUE INCREASE (DECREASE)	\$	<u>68,127</u>
NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS	\$	18,392
MONTHLY SERVICE CHARGE		
\$1,604 x 12 MONTHS		19,248
		<hr/>
REQUIRED SERVICE REVENUE INCREASE (DECREASE)	\$	<u>(856)</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		<u>11.11%</u>

CITY OF EAST GRAND RAPIDS, MICHIGAN

**SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27**

SYSTEM REVENUE REQUIREMENTS \$ 672,829

NEW COMMODITY CHARGE *

419.993 x \$ 1,558.00 =

(654,349)

\$ 18,480

MONTHLY SERVICE CHARGE * = \$ 18,480 / 12 = \$1,540

* NEW RATES EFFECTIVE ON JANUARY 1, 2014

ADA TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

INTEGRATED SYSTEM REVENUE REQUIREMENTS	\$	615,006
COMMODITY CHARGE		
311.423 units x \$ 1,763.00		549,039
		<hr/>
REQUIRED COMMODITY REVENUE INCREASE (DECREASE)	\$	<u>65,967</u>
NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS	\$	512,448
MONTHLY SERVICE CHARGE		
\$45,912 x 12 MONTHS		550,944
		<hr/>
REQUIRED SERVICE REVENUE INCREASE (DECREASE)	\$	<u>(38,496)</u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		<u>2.50%</u>

ADA TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

SYSTEM REVENUE REQUIREMENTS	\$ 1,127,454
NEW COMMODITY CHARGE *	
311.423 x \$ 1,975.00 =	(615,060)
	<hr/>
	<u>\$ 512,394</u>

MONTHLY SERVICE CHARGE * = \$512,394 / 12 = \$42,700

* NEW RATES EFFECTIVE ON JANUARY 1, 2014

GAINES TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 26

INTEGRATED SYSTEM REVENUE REQUIREMENTS	\$	133,731
COMMODITY CHARGE		
96.398 units x \$ 1,310.00		126,281
		<hr/>
REQUIRED COMMODITY REVENUE INCREASE (DECREASE)	\$	<u><u>7,450</u></u>
NON-INTEGRATED SYSTEM REVENUE REQUIREMENTS	\$	15,970
MONTHLY SERVICE CHARGE		
\$1,574 x 12 MONTHS		18,888
		<hr/>
REQUIRED SERVICE REVENUE INCREASE (DECREASE)	\$	<u><u>(2,918)</u></u>
PERCENTAGE INCREASE (DECREASE) OVER EXISTING RATES		<u><u>3.12%</u></u>

GAINES TOWNSHIP
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RATE ANALYSIS - TASK NO. 27

SYSTEM REVENUE REQUIREMENTS	\$ 149,701
NEW COMMODITY CHARGE *	
96.398 x \$ 1,387.00 =	(133,704)
	<hr/>
	<u>\$ 15,997</u>

MONTHLY SERVICE CHARGE * = \$ 15,997 / 12 = \$1,333

* NEW RATES EFFECTIVE ON JANUARY 1, 2014

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 7, 2013

TO: Geri Eye
Utility Financial Officer

FROM: Rick DeVries, P.E.
Assistant City Engineer

SUBJECT: SEWER RATE STUDY - TASK NO. 28 AND 29

Enclosed are the Front Foot Rates for Sanitary Sewer (Task 28) and the costs for Sanitary Sewer Laterals (Task 29), for the Fiscal Year 2013.

RDV

Enclosures

cc: Jack Stegehuis
Mark Garvey

SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
RE-EVALUATE FRONT FOOT CHARGES
TASK NO. 28

The City Engineer's Office has reviewed current construction costs for sewer facilities and recommends the following front foot assessment rates:

	<u>2013</u>	<u>2014</u>	<u>% Increase</u>
Domestic Sewer User	\$ 70.00	\$ 80.00	14.29%
Commercial - Industrial User (Sewer over 8 in. diameter)	\$ 104.00	\$ 109.00	4.81%

The rates are based on an average of prices quoted in bid proposals which have been received by the City Engineer's Office during the period July, 2012 through June, 2013. Calculations of the rates are on file in the City Engineer's Office.

SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
EVALUATE SEWER LATERAL CHARGES
TASK NO. 29

The City Engineer's Office has evaluated the cost for a six inch (6") sanitary sewer lateral and recommends that sewer lateral costs should be as follows:

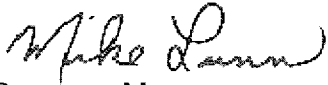
<u>R.O.W. WIDTH</u>	<u>COST FOR 6-INCH LATERAL</u>		
	<u>2013</u>	<u>2014</u>	<u>% Increase</u>
50 ft.	\$2,150	\$2,400	11.63%
60 ft.	\$2,550	\$2,850	11.76%
66 ft.	\$2,800	\$3,100	10.71%
80 ft.	\$3,350	\$3,650	8.96%
100 ft.	\$4,100	\$4,500	9.76%

MEMORANDUM

CITY OF GRAND RAPIDS

Date: October 17, 2013

To: Geri Eye
Utility Financial Officer

From: Michael Lunn 
Environmental Services Manager

Subject: Sewer Rate Study – Task #30 - Surcharges

The Wastewater Treatment plant has a limited amount of capacity which is typically allocated to industries having discharges exceeding ordinance limits. These industries are charged for utilizing this remaining plant capacity in four categories of conventional pollutants. These pollutants are: 1) Biochemical Oxygen Demand (BOD); 2) Total Suspended Solids (TSS); 3) Total Phosphorus (Phos); 4) and Ammonia Nitrogen (NH₃). This benefits the industries in that it reduces their pretreatment requirements and benefits the system by utilizing available system capacity.

As shown on the attached sheets, the surcharge methodology includes evaluating various cost centers at the Wastewater Treatment plant and allocating costs based on unit process operating cost. Cumulative costs can then be allocated to the four conventional pollutant categories identified above to determine appropriate surcharge rates.

**City of Grand Rapids Michigan
Sewage Disposal System Fund
Evaluation of Wastewater Surcharges for Industrial Customers- BOD, TSS, Phos & NH3
TASK NO. 30- Part 1**

Description	Rate Study Year 2013	Volume	Wastewater Surcharges				Industrial	Other
			BOD	TSS	Phos	NH3		
Operation & Maintenance (See Part 2)	\$ 24,726,721	\$ 3,828,206	\$ 3,947,164	\$ 4,849,241	\$ 859,392	\$ 440,030	\$ 643,490	\$ 10,159,198
Depreciation (See Part 3)	6,089,569	648,055	668,184	820,876	145,479	74,484	-	3,732,491
Return on System Investment (See Part 3)	11,379,865	778,031	802,197	985,513	174,656	89,422	-	8,550,046
Total	<u>\$ 42,196,155</u>	<u>\$ 5,254,292</u>	<u>\$ 5,417,545</u>	<u>\$ 6,655,630</u>	<u>\$ 1,179,527</u>	<u>\$ 603,936</u>	<u>\$ 643,490</u>	<u>\$ 22,441,735</u>

Recommended Surcharge Rate - 2014

\$ 0.215 \$ 0.338 \$ 2.062 \$ 0.295

Actual Surcharge Rate - 2013

\$ 0.193 \$ 0.277 \$ 2.158 \$ 0.294

Change in Surcharge Rate - Amount- 2013 to 2014

\$ 0.022 \$ 0.061 \$ (0.096) \$ 0.001

Change in Surcharge Rate - Percent- 2013 to 2014

11.40% 22.02% -4.45% 0.34%

Loadings - lb/day (Per Lunn email of 09/24/2013) *

69,003 53,910 1,567 5,604

Loadings - lb/year

25,186,095 19,677,150 571,955 2,045,460

* Loadings are the average of the last three years.

Task No. 30 - Part 2

City of Grand Rapids Michigan
Sewage Disposal System Fund
Evaluation of High Strength Surcharges- BOD, TSS, Phos & NH3
Allocation of Operation & Maintenance Expense & Determination of WWTP Allocation Factors

	Primary Allocation		See Task 30 - Part 4		Component Allocation (3)						
	Base Year- 2013 Allocation (1)	Calendar Year- 2014 Allocation (2)	Allocation Basis	Line No. Ref.	Volume	BOD	TSS	Phos	NH3	Industrial	Other
Wastewater Treatment Plant											
Pre-Treatment	\$ 957,234	\$ 1,092,751	WWTP	(1)	\$ 1,092,751	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Primary Treatment	1,486,135	1,696,530	WWTP	(2)	-	508,959	1,017,918	-	169,653	-	-
Secondary Treatment	2,385,231	2,722,912	WWTP	(3)	680,727	1,089,165	408,437	408,437	136,146	-	-
Disinfection/Dechlorination	934,546	1,066,851	WWTP	(4)	1,066,851	-	-	-	-	-	-
Phosphorus Removal	554,890	633,447	WWTP	(5)	316,723	-	-	316,724	-	-	-
Residue Handling/Disposal	5,879,211	6,711,542	WWTP	(6)	671,154	2,349,040	3,422,886	134,231	134,231	-	-
	<u>\$ 12,197,247</u>	<u>\$ 13,924,033</u>			<u>\$ 3,828,206</u>	<u>\$ 3,947,164</u>	<u>\$ 4,849,241</u>	<u>\$ 859,392</u>	<u>\$ 440,030</u>	<u>\$ -</u>	<u>\$ -</u>
Lift Stations											
Interceptor		259,244	Collection	(11)	-	-	-	-	-	-	259,244
Trunk		113,588	Collection	(11)	-	-	-	-	-	-	113,588
Local Collector		406,985	Collection	(11)	-	-	-	-	-	-	406,985
Sewer Lines											
Interceptor		276,639	Collection	(11)	-	-	-	-	-	-	276,639
Trunk		591,598	Collection	(11)	-	-	-	-	-	-	591,598
Local Collector		4,317,122	Collection	(11)	-	-	-	-	-	-	4,317,122
Bulk Meter Stations		10,685	Collection	(7)	-	-	-	-	-	-	10,685
Customer Accounting		2,559,086	Admin	(8)	-	-	-	-	-	-	2,559,086
Industrial Pretreatment		643,490	Industry	(9)	-	-	-	-	-	643,490	-
Subtotal	\$ 23,102,470				\$ 3,828,206	\$ 3,947,164	\$ 4,849,241	\$ 859,392	\$ 440,030	\$ 643,490	\$ 8,534,947
Admin	1,624,251		Admin	(10)	-	-	-	-	-	-	1,624,251
Total	<u>\$ 24,726,721</u>				<u>\$ 3,828,206</u>	<u>\$ 3,947,164</u>	<u>\$ 4,849,241</u>	<u>\$ 859,392</u>	<u>\$ 440,030</u>	<u>\$ 643,490</u>	<u>\$ 10,159,198</u>
WWTP Allocation Factors		100.000%			27.494%	28.348%	34.826%	6.172%	3.160%	0.000%	0.000%

(1) Based on 09/24/2013 Lunn email.

(2) Primary Allocation of Current Year for Calendar 2014, based on 2013 Base Year.

(3) Refer to Task 30- Part 4 as noted.

Task No. 30 - Part 3

**City of Grand Rapids Michigan
Sewage Disposal System Fund
Evaluation of High Strength Surcharges- BOD, TSS, Phos & NH3
Allocation of Depreciation Expense & Return on System Investment**

Depreciation Expense- Task 24

<i>Description</i>	<i>Amount</i>	<i>Volume</i>	Wastewater Surcharges				<i>Industrial</i>	<i>Other</i>
			BOD	TSS	Phos	NH3		
<i>Integrated System (1)</i>	\$ 2,357,078	\$ 648,055	\$ 668,184	\$ 820,876	\$ 145,479	\$ 74,484	\$ -	\$ -
<i>Other</i>	3,732,491	-	-	-	-	-	-	3,732,491
<i>Total</i>	<u>\$ 6,089,569</u>	<u>\$ 648,055</u>	<u>\$ 668,184</u>	<u>\$ 820,876</u>	<u>\$ 145,479</u>	<u>\$ 74,484</u>	<u>\$ -</u>	<u>\$ 3,732,491</u>

Return on System Investment- Task 21

<i>Description</i>	<i>Amount</i>	<i>Volume</i>	Wastewater Surcharges				<i>Industrial</i>	<i>Other</i>
			BOD	TSS	Phos	NH3		
<i>Integrated System (1)</i>	\$ 2,829,819	\$ 778,031	\$ 802,197	\$ 985,513	\$ 174,656	\$ 89,422	\$ -	\$ -
<i>Other</i>	8,550,046	-	-	-	-	-	-	8,550,046
<i>Total</i>	<u>\$ 11,379,865</u>	<u>\$ 778,031</u>	<u>\$ 802,197</u>	<u>\$ 985,513</u>	<u>\$ 174,656</u>	<u>\$ 89,422</u>	<u>\$ -</u>	<u>\$ 8,550,046</u>

(1) Allocated on WWTP Allocation Factors * 27.4940% 28.3480% 34.8260% 6.1720% 3.1600%

* Refer to Task No. 30 - Part 2

Task No. 30 - Part 4

**City of Grand Rapids Michigan
Sewage Disposal System Fund
Evaluation of High Strength Surcharges- BOD, TSS, Phos & NH3
Functional Cost Allocation Factors**

Line No. Ref.	Cost Function		Total %	Allocation Basis	Volume %	Wastewater Surcharges				Industrial %	Other %
						BOD %	TSS %	Phos %	NH3 %		
(1)	Pre-Treatment	(a)	100.000%	WWTP	100.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
(2)	Primary Treatment	(a)	100.000%	WWTP	0.000%	30.000%	60.000%	0.000%	10.000%	0.000%	0.000%
(3)	Secondary Treatment	(a)	100.000%	WWTP	25.000%	40.000%	15.000%	15.000%	5.000%	0.000%	0.000%
(4)	Disinfection/Dechlorination	(a)	100.000%	WWTP	100.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
(5)	Phosphorus Removal	(a)	100.000%	WWTP	50.000%	0.000%	0.000%	50.000%	0.000%	0.000%	0.000%
(6)	Residue Handling/Disposal	(a)	100.000%	WWTP	10.000%	35.000%	51.000%	2.000%	2.000%	0.000%	0.000%
(7)	Bulk Metering Stations		100.000%	Collection	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	100.000%
(8)	Customer Accounting		100.000%	Admin	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	100.000%
(9)	Industrial Pretreatment		100.000%	Industry	0.000%	0.000%	0.000%	0.000%	0.000%	100.000%	0.000%
(10)	Admin		100.000%	Admin	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	100.000%
(11)	Collection System		100.000%	Collection	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	100.000%

(a) With the exception of phosphorus removal, foregoing based on "Final Allocation Table" in August 1, 2003 memo from Randall Fisher & Mike Lunn to Eric DeLong regarding 2001 Surcharge Rate Evaluation. Evaluation by WWTP staff for 2013 RS Review concluded percentages for phosphorus removal shall remain allocated 50/50 to the categories above, as initially recommended in the 2006 RS Review, to recommend 2014 rate adjustments.

***CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
IPP PERMIT FEE STRUCTURE – TASK NO. 31***

The City of Grand Rapids Industrial Pretreatment Program (IPP) Permit fee structure is based on the actual cost of administration and implementation. Administration includes all the costs associated with document generation and handling as well as one annual site visit. The implementation costs include all sampling and associated laboratory analyses required by the permit. These two fees are identified on permit documents as a Permit Fee and an Analytical Fee.

Permit Fee: This fee is based on the actual costs associated with administering the permit program, including time spent on permit required inspections, clerical requirements, data handling requirements and all trunkline monitoring. This fee will be specific to the costs associated with the permit category.

Analytical Fee: This fee is based on actual costs associated with each permit. The costs, and an explanation of how they are determined, are outlined in an accompanying attachment. Labor time, including sampling and sample delivery to our laboratory, was derived from experience:

Composite samples:	1.5 hours each
Grab samples:	1.0 hours each

Four examples of analytical fees are attached herewith.

City of Grand Rapids **Cost of Services Provided by IPP**

Last Update: 10/17/2013

Permit Fee: \$ 400.00

IPP Costs:

Labor:	\$ 57.57	per hour
Vehicle:	\$ 4.01	per hour
Sampler:	\$ 35.00	per day

IPP Accounting:

Composite Labor:	1.5	hours per sample
Grab Sample Labor:	1.0	hours per sample

Laboratory Costs:

metals	\$ 7.00	ea.
TSS	\$ 7.00	ea.
BOD	\$ 14.00	ea.
total phosphate	\$ 13.50	ea.
pH	\$ 5.00	ea.
EPA 624	\$ 60.00	ea.
EPA 625	\$ 115.00	ea.
BTEX/MTBE	\$ 35.00	ea.
sulfide	\$ 12.00	ea.
oil & grease	\$ 25.00	ea.
total cyanide	\$ 15.00	ea.
hex chrome	\$ 10.00	ea.
fecal coliform	\$ 25.00	ea.
Mercury (EPA 245.1 or 245.2)	\$ 15.00	ea.
Ammonia as (NH ₃ -N)	\$ 9.00	ea.

Explanation of Costs:

Labor: Labor is the hourly pay rate of a Water Pollution Control Inspector (classification 21A @ "F" step = to \$28.7842 x 2) per the latest agreement between the City of Grand Rapids and the Grand Rapids Employees Independent Union plus 100% as specified in section 2.81(1) of the City of Grand Rapids Sewage Disposal System Ordinance. If personnel in a different classification are required, time will be billed based on that classification's pay scale plus 100%.

Vehicle: Hourly rate is the actual cost charged to City departments for vehicle use plus 25% for overhead.

Sampler: Sampler costs are derived from an average of the lowest quoted prices obtained from private suppliers in the greater Grand Rapids Area.

Analysis: Laboratory costs are based on the most recently approved competitive bid obtained for contract work provided to the Grand Rapids Wastewater Treatment Plant's Laboratory.

Permit No: Example 1

Company: Typical Metal Finisher
Facility Address:
City, State, Zip

Permit Fee: \$ 400.00
Analytical Fee: \$ 785.48
Amount Due: \$ 1,185.48

Composite Samples: 4

IPP Requirements: man hours = 6.0 x \$ 57.57 = \$ 345.42
sampler days = 4.0 x \$ 35.00 = \$ 140.00
vehicle hours = 6.0 x \$ 4.01 = \$ 24.06

Total IPP Composite Costs: \$ 509.48

Laboratory Analysis: metals 7 x \$ 7.00 = \$ 49.00
(each composite) TSS x \$ 7.00 = \$ -
BOD x \$ 14.00 = \$ -
total phosphorus x \$ 13.50 = \$ -
pH x \$ 5.00 = \$ -
EPA 625 x \$ 115.00 = \$ -
sulfide x \$ 12.00 = \$ -
oil & grease x \$ 25.00 = \$ -
hex chrome x \$ 10.00 = \$ -
fecal coliform x \$ 25.00 = \$ -
other x = \$ -

total per composite: \$ 49.00

Total Laboratory Composite Costs: \$ 196.00

Total Composite Sample Costs: \$ 705.48

Grab Samples: 4

IPP Requirements: man hours = 0.0 x \$ 57.57 = \$ -
vehicle hours = 0.0 x \$ 4.01 = \$ -

Total IPP Grab Costs: \$ -

Laboratory Analysis: metals x \$ 7.00 = \$ -
(each grab) TSS x \$ 7.00 = \$ -
BOD x \$ 14.00 = \$ -
total phosphorus x \$ 13.50 = \$ -
pH 1 x \$ 5.00 = \$ 5.00
EPA 624 x \$ 60.00 = \$ -
EPA 625 x \$ 115.00 = \$ -
BTEX/MTBE x \$ 35.00 = \$ -
sulfide x \$ 12.00 = \$ -
oil & grease x \$ 25.00 = \$ -
total cyanide 1 x \$ 15.00 = \$ 15.00
hex chrome x \$ 10.00 = \$ -
fecal coliform x \$ 25.00 = \$ -
other x = \$ -

total per grab: \$ 20.00

Total Laboratory Grab Costs: \$ 80.00

Total Grab Sample Costs: \$ 80.00

Total Analytical Permit Costs: \$ 785.48

Permit No: Example 2

Company: Litho Process
Facility Address:
City, State, Zip

Permit Fee: \$ 400.00
Analytical Fee: \$ 66.58
Amount Due: \$ 466.58

Composite Samples:

IPP Requirements: man hours = 0.0 x \$ 57.57 = \$ -
sampler days = 0.0 x \$ 35.00 = \$ -
vehicle hours = 0.0 x \$ 4.01 = \$ -

Total IPP Composite Costs: \$ -

Laboratory Analysis: metals x \$ 7.00 = \$ -
(each composite) TSS x \$ 7.00 = \$ -
BOD x \$ 14.00 = \$ -
total phosphorus x \$ 13.50 = \$ -
pH x \$ 5.00 = \$ -
EPA 625 x \$ 115.00 = \$ -
sulfide x \$ 12.00 = \$ -
oil & grease x \$ 25.00 = \$ -
hex chrome x \$ 10.00 = \$ -
fecal coliform x \$ 25.00 = \$ -
other x = \$ -
total per composite: \$ -

Total Laboratory Composite Costs: \$ -

Total Composite Sample Costs: \$ -

Grab Samples: 1

IPP Requirements: man hours = 1.0 x \$ 57.57 = \$ 57.57
vehicle hours = 1.0 x \$ 4.01 = \$ 4.01

Total IPP Grab Costs: \$ 61.58

Laboratory Analysis: metals x \$ 7.00 = \$ -
(each grab) TSS x \$ 7.00 = \$ -
BOD x \$ 14.00 = \$ -
total phosphorus x \$ 13.50 = \$ -
pH 1 x \$ 5.00 = \$ 5.00
EPA 624 x \$ 60.00 = \$ -
EPA 625 x \$ 115.00 = \$ -
BTEX/MTBE x \$ 35.00 = \$ -
sulfide x \$ 12.00 = \$ -
oil & grease x \$ 25.00 = \$ -
total cyanide x \$ 15.00 = \$ -
hex chrome x \$ 10.00 = \$ -
fecal coliform x \$ 25.00 = \$ -
other x = \$ -
total per grab: \$ 5.00

Total Laboratory Grab Costs: \$ 5.00

Total Grab Sample Costs: \$ 66.58

Total Analytical Permit Costs: \$ 66.58

Permit No: Example 3

Company: Stripping Process

Facility Address:

City, State, Zip

Permit Fee: \$ 400.00
Analytical Fee: \$ 101.58
Amount Due: \$ 501.58

Composite Samples:

IPP Requirements: man hours = 0.0 x \$ 57.57 = \$ -
sampler days = 0.0 x \$ 35.00 = \$ -
vehicle hours = 0.0 x \$ 4.01 = \$ -

Total IPP Composite Costs: \$ -

Laboratory Analysis: metals x \$ 7.00 = \$ -
(each composite) TSS x \$ 7.00 = \$ -
BOD x \$ 14.00 = \$ -
total phosphorus x \$ 13.50 = \$ -
pH x \$ 5.00 = \$ -
EPA 625 x \$ 115.00 = \$ -
sulfide x \$ 12.00 = \$ -
oil & grease x \$ 25.00 = \$ -
hex chrome x \$ 10.00 = \$ -
fecal coliform x \$ 25.00 = \$ -
other x = \$ -
total per composite: \$ -

Total Laboratory Composite Costs: \$ -

Total Composite Sample Costs: \$ -

Grab Samples: 1

IPP Requirements: man hours = 1.0 x \$ 57.57 = \$ 57.57
vehicle hours = 1.0 x \$ 4.01 = \$ 4.01

Total IPP Grab Costs: \$ 61.58

Laboratory Analysis: metals 5 x \$ 7.00 = \$ 35.00
(each grab) TSS x \$ 7.00 = \$ -
BOD x \$ 14.00 = \$ -
total phosphorus x \$ 13.50 = \$ -
pH 1 x \$ 5.00 = \$ 5.00
EPA 624 x \$ 60.00 = \$ -
EPA 625 x \$ 115.00 = \$ -
BTEX/MTBE x \$ 35.00 = \$ -
sulfide x \$ 12.00 = \$ -
oil & grease x \$ 25.00 = \$ -
total cyanide x \$ 15.00 = \$ -
hex chrome x \$ 10.00 = \$ -
fecal coliform x \$ 25.00 = \$ -
other x = \$ -
total per grab: \$ 40.00

Total Laboratory Grab Costs: \$ 40.00

Total Grab Sample Costs: \$ 101.58

Total Analytical Permit Costs: \$ 101.58

Permit No: Example 4

Company: Silver User - photoprocessor
Facility Address:
City, State, Zip

Permit Fee: \$ 400.00
Analytical Fee: \$ 205.74
Amount Due: \$ 605.74

Composite Samples:

IPP Requirements: man hours = 0.0 x \$ 57.57 = \$ -
sampler days = 0.0 x \$ 35.00 = \$ -
vehicle hours = 0.0 x \$ 4.01 = \$ -

Total IPP Composite Costs: \$ -

Laboratory Analysis: metals x \$ 7.00 = \$ -
(each composite) TSS x \$ 7.00 = \$ -
BOD x \$ 14.00 = \$ -
total phosphorus x \$ 13.50 = \$ -
pH x \$ 5.00 = \$ -
EPA 625 x \$ 115.00 = \$ -
sulfide x \$ 12.00 = \$ -
oil & grease x \$ 25.00 = \$ -
hex chrome x \$ 10.00 = \$ -
fecal coliform x \$ 25.00 = \$ -
other x = \$ -

total per composite: \$ -

Total Laboratory Composite Costs: \$ -

Total Composite Sample Costs: \$ -

Grab Samples: 3

IPP Requirements: man hours = 3.0 x \$ 57.57 = \$ 172.71
vehicle hours = 3.0 x \$ 4.01 = \$ 12.03

Total IPP Grab Costs: \$ 184.74

Laboratory Analysis: metals 1 x \$ 7.00 = \$ 7.00
(each grab) TSS x \$ 7.00 = \$ -
BOD x \$ 14.00 = \$ -
total phosphorus x \$ 13.50 = \$ -
pH x \$ 5.00 = \$ -
EPA 624 x \$ 60.00 = \$ -
EPA 625 x \$ 115.00 = \$ -
BTEX/MTBE x \$ 35.00 = \$ -
sulfide x \$ 12.00 = \$ -
oil & grease x \$ 25.00 = \$ -
total cyanide x \$ 15.00 = \$ -
hex chrome x \$ 10.00 = \$ -
fecal coliform x \$ 25.00 = \$ -
other x = \$ -

total per grab: \$ 7.00

Total Laboratory Grab Costs: \$ 21.00

Total Grab Sample Costs: \$ 205.74

Total Analytical Permit Costs: \$ 205.74

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: October 10, 2013

TO: Gerri Eye
Utility Financial Officer

FROM: Charles R. Schroeder, PE
Assistant Environmental Services Manager

SUBJECT: **2013 SEWER RATE STUDY - TASK #32 – SANITARY SEWER
OVERSIZING RATES**

Sanitary Sewer Oversizing rates are established as follows:

<u>Description</u>	<u>Amount (Per lineal foot)</u>
8" to 10"	\$ 6.62
8" to 12"	\$ 12.14
8" to 15"	\$ 21.83
10" to 12"	\$ 5.52
10" to 15"	\$ 15.21
12" to 15"	\$ 9.69

These rates have been determined in accordance with the Sewage Disposal System Rules and Regulations and are approved for use from January 1, 2014 through December 31, 2014. Background information and calculations to establish these rates are on file in the Utility Engineering Distribution and Collection Division Office located at 1900 Oak Industrial Drive, NE. If you have any questions regarding this matter, please call me at extension 3690 (456-3690)

CRS/SS

srs\stask32 2013

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 33**

SERVICE AREA MAPS AND SERVICE AREA LAND MASS SUMMARIES

The following summarizes Utility Service Districts (USD) land mass square miles for UAB partner communities, per information on file as of October 07, 2013:

UAB Partners	Sq. Miles of USD by CC	Percent
Grand Rapids	45.36	38.500%
Walker	20.17	17.119%
Kentwood	14.28	12.120%
Cascade	16.21	13.758%
Grand Rapids Township	7.95	6.748%
Tallmadge Township	2.44	2.071%
Wright Township	0.89	0.755%
East Grand Rapids	3.37	2.860%
Ada	7.15	6.069%
Total	117.82	100.000%

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWAGE DISPOSAL SYSTEM FUND
TASK NO. 34**

INDIVIDUAL CIRCUIT BREAKER AND CITY & CUSTOMER COMMUNITY CIRCUIT BREAKER

The Third Amendment to the Water and Sanitary Sewer Agreements stipulates penalty fees shall be used to fund the circuit breaker provisions noted above. The following summarizes those values:

Description	AMOUNT	PERCENT
Individual Circuit Breaker	\$ 80,604	12.50%
City & Customer Community Circuit Breaker	564,226	87.50%
Total	<u>\$ 644,830</u>	<u>100.00%</u>

The following summarizes the amount, if any, of the City & Customer Community Circuit Breaker to be applied as a revenue credit in next year's Rate Study:

Description	AMOUNT	PERCENT
City & Customer Community Circuit Breaker Amount- Above	\$ 564,226	100.00%
Less: Amount Applied in Current Rate Study	(133,698)	-23.70%
Total Revenue Credit- Next Year's Rate Study	<u>\$ 430,528</u>	<u>76.30%</u>


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MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 12, 2013

TO: Geri Eye
Utility Financial Officer

FROM: Mike Lunn 
Environmental Services Manager

SUBJECT: 2013 SEWER RATE STUDY - TASK #35- FDD Opt Out Charge

The Footing Drain Disconnection Ordinance (FDD) Authorizes the City Manager or his designee to identify FDD Project Areas within the City of Grand Rapids based on the severity of System groundwater and stormwater inflow surcharge problems. Once designated, the ordinance requires homeowners within the FDD Project Areas to disconnect their footing drains from the City's sanitary sewer system at City expense.

The additional charge for non-compliance with the footing drain disconnection ordinance has been calculated based on current information and recommended to be \$73.40 which is the actual cost to the system for the additional flow.

ML

**CITY OF GRAND RAPIDS, MICHIGAN
SEWER RATE STUDY
SEWER SUPPLY SYSTEM FUND
TASK NO. 35**

DETERMINE FOOTING DRAIN OPT OUT SEWER RATE.

1. Avoided Claims for Sewage Backups

Annual claim costs

Annual Backup Claims	\$150,000 /year ¹	Estimated annual claims cost
System Retail Customers	74,053	Total retail customers ²
Grand Rapids Retail Customers	<u>58,265</u>	Total retail customers in Grand Rapids ²
Annual Cost	\$2.03 /yr/cust.	Annual cost for claims in Grand Rapids

2. Avoided Costs to treat the additional flow generated by footing drains

Flow Estimate

DWF	43,800 gal/year	Average generation rate
WWF	<u>21,796</u> gal/year	Average generation rate
Total	65,596 gal/year	Average per house

Unit Conveyance & Treatment Costs

Annual average FD flows	0.065596 MG/yr	Average per house
Conveyance	\$395 /MG	Unit conveyance cost ³
Treatment	<u>\$922</u> /MG	Unit treatment cost ³
Conveyance & Treatment	\$1,317 /MG	
Annual Cost	\$86.39 /yr/cust.	Annual cost for a connected FD

3. Actual MDNRE penalties for SSO's

Penalties for SSO

Grand Rapids Customers	58,265	
Penalties	\$25,000	Per occurrence
Potential SSOs	0 /year	Occurrences
Annual cost	<u>0</u> \$/year	
	\$0.00 /yr/cust.	Annual cost for penalties

4. Avoided Transport & Future Projects

Cost Per FDD

Pilot Project Costs	1,788 \$/yr/FDD cust.	Annual cost of FDD work ⁵
FDD Equivalents	<u>25,598</u> FDD	FDDs needed to correct backup problems
Total Cost	\$45,769,224	Annualized Conveyance and Storage Costs
Grand Rapids Customers	<u>58,265</u>	Customers in Grand Rapids
Cost Per single Family Home	\$785.54 \$/home/not removed	Annualized cost for Grand Rapids Customers

5. Avoided Administrative (Engineering & Legal) Costs

Associated with Administration of claims, construction

Legal	0.5	Citywide claims administration
Engineering	<u>1.5</u>	Citywide engineering investigation
Staffing	2.0	Total staffing
Rate	\$200,000 /year	Average loaded staffing rate ⁴
Total	\$400,000 /year	
Customers	<u>58,265</u>	In Grand Rapids
	\$6.87 \$/yr/cust.	

Annual Cost Summary

1. Avoided Claims	\$2.03	
2. Avoided Treatment	\$86.39	
3. Actual MDNRE Penalties for SSOs	\$0.00	
4. Avoided Future Projects	\$785.54	
5. Administration	<u>\$6.87</u>	
TOTAL	\$880.83 \$/yr/cust.	
	\$73.40 /month/cust.	Monthly fee for not disconnecting

Notes:

¹ Sinking fund annual budget

² Customer numbers per 2013 Rate Study

³ Value for sewer maintenance and WWTP costs from 2013 rate study.

⁴ Estimated staff rate with benefits

⁵ Total cost per FDD amortized over 20 years with 2.5% interest rate

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PRELIMINARY RATE STUDY

MEMORANDUM

CITY OF GRAND RAPIDS

DATE: November 14, 2013

TO: Eric R. DeLong
Deputy City Manager

FROM: Geri D. Eye, CPA
Utility Financial Officer 

SUBJECT: 2013 WATER/SEWER RATE STUDY - PRELIMINARY REPORT

The preliminary study, recommending water and sewer rates as of January 1, 2014, for Grand Rapids and the retail and wholesale communities it serves, is submitted herein for consideration. A table of contents immediately precedes the report's two sections and lists the respective tasks performed in reviewing the Water Supply System's and Sewage Disposal System's operating and financial performance. The annual study considers variations in customer base, usage, and operating and capital costs by community and calculates recommended commodity and service rates based upon adherence to: (a) the uniform rate-setting methodology established in 1976-77 for customer communities not party to the uniform water and sewer service agreements; and (b) rate methodology changes contractually agreed in the uniform water and sewer service agreements for Utility Advisory Board (UAB) member customer communities. The methodology yields consistent performance in providing for the long-term needs of the water and sewage systems and satisfying debt service coverage pursuant to the systems' master bond ordinance covenants.

This year's review marks the 36th annual water/sewer rate study report and has yielded a water rate decrease and a sewer rate increase. The preliminary 2013 water rate recommendation represents the second consecutive water rate reduction and third reduction in the last four years. The preliminary 2013 sewer rate recommendation represents an increase equal to last year's rate decrease. Sewer rates have experienced two decreases and two increases over the last four years and are down 0.41% over that time period. The 2013 rate study continues to use the three year average of billed volume to calculate new rates. Slightly lower operating costs, higher integrated connection fee revenues and other revenue credits, increasing average billed volume, and a larger customer base all contribute to the favorable water rate change. Conversely, slightly higher operating costs, lower surcharge revenues, and decreasing billed volume contribute to the sewer rate increase.

A summary of the proposed revisions to set the 2014 rates for the systems are as follows:

1. Water Supply System revenue requirements reflect a decrease of \$1,735,395 or 4.30% less than revenues generated by existing rates and charges. This rate adjustment now includes revenues associated with water tank rental to cellular and Internet service providers for antenna equipment.
2. Sewage Disposal System revenue requirements reflect an increase of \$1,177,402 or 2.46% more than revenues generated by existing rates and charges. This rate adjustment properly excludes costs associated with the spring 2013 flood event expected to be reimbursed by FEMA.
3. Water and sewer integrated connection fees were adjusted upward by a CPI increase factor of 1.52%.
4. Water and sewer front foot rates and charges for water service lines and sewer laterals are being adjusted based on the average bid prices quoted in bid proposals received by the City Engineer during the period from July, 2012, through June, 2013.
5. The fees, charges, and penalties within the Water System Rules and Regulations will remain the same except for the security deposit, which will decrease by 5.8% based on three times the average quarterly retail water and sewer services bill. Also, fees for Omni type meters will be added based on the most recent bid for frozen/damaged/missing meters.
6. Surcharge rates will be adjusted in 2014 to reflect increased wastewater treatment plant costs and allocated on a three year average of loadings at the plant.
7. The cost of services provided by the Industrial Pretreatment Program will remain the same except for the vehicle charge per hour, which will increase by 6% based on the actual cost charged to City departments for vehicle use.
8. Water and sewer oversizing rates will increase based on the current cost of materials.
9. The charge for non-compliance with the footing drain disconnection ordinance (FDD Opt Out Charge) will increase to \$73.40 from \$73.20 based on current information related to the actual cost to the system for the additional flow.

Recommended rate adjustments incorporate provisions of the third amendment to the uniform service agreements with customer communities, which eliminates penalty fee credits from retail revenue requirements to fund the Individual Circuit Breaker (ICB) and the City and Customer Community Circuit Breaker (CCCCB). This amendment generated \$148,743 to support the ICB, the program aimed to assist retail customers requiring assistance in payment of their water/sewer bills, and represents a \$5,088 increase from the 2012 rate study. The third amendment also provides for a City and Customer Community Circuit Breaker, if sufficient funding is available, to limit each retail service area revenue requirement change to a level in line with the overall systems' initial average change. Adequate funds were available in both systems to provide full water circuit breaker relief to

Walker, Cascade, and Tallmadge, and full sewer circuit breaker relief to Kentwood, Cascade, Grand Rapids Township, Tallmadge, and Wright.

Three schedules supplement and immediately follow this memo. The first schedule summarizes the revenue requirement changes by customer community. The second schedule shows water and sewer rate adjustment impacts to a typical domestic customer with the system average quarterly consumption in each retail community. It also includes a comparison of the approximate monthly charge for Wright Township's residential equivalent unit (REU) rate structure. The final schedule shows comparative water and sewer monthly service and commodity rate adjustments for the City's wholesale customer communities.

Announcement of the proposed 2014 water and sewer rates to the UAB partners and other customer communities is scheduled for today, November 14, 2013. All customer communities have a thirty-day comment period following notification of the rates as provided in the water/sewer service agreements. Approval of customer community rates by resolution of the City of Grand Rapids Commission is scheduled for Tuesday, December 17, 2013.

Resolutions have been prepared providing for publication of the proposed ordinances amending the water and sewer rates and charges, establishing December 3, 2013, as the date for public hearing, and setting December 17, 2013, as the date to consider adoption of the proposed ordinances.

Attachments

CITY OF GRAND RAPIDS, MICHIGAN
2013 PRELIMINARY WATER/SEWER RATE STUDY
SUMMARY OF REVENUE REQUIREMENT CHANGES
November 13, 2013

	WATER (1)		SEWER (1)	
	AMOUNT	PERCENT	AMOUNT	PERCENT
GRAND RAPIDS	\$ (965,560)	-4.03%	\$ 738,617	2.25%
WALKER	(124,627)	-3.88%	108,859	2.36%
KENTWOOD	(227,165)	-5.29%	98,572	2.74%
CASCADE TWP	(118,885)	-3.88%	54,928	2.74%
GRAND RAPIDS TWP (2)	(96,174)	-4.42%	63,272	2.74%
TALLMADGE TWP	(5,055)	-3.88%	7,111	2.74%
WRIGHT TWP	NA	NA	6,769	2.74%
EAST GRAND RAPIDS	(55,853)	-6.16%	67,271	11.11%
ADA TWP	(92,563)	-7.32%	27,471	2.50%
OTTAWA COUNTY	(49,514)	-3.54%	NA	NA
GAINES TWP	NA	NA	4,532	3.12%
SYSTEM	\$ (1,735,395)	-4.30%	\$ 1,177,402	2.46%

(1) Change in revenue requirements based on revenues currently generated from rates, customer base and volumes reported in the preliminary rate study (Includes consideration for relief from CCCCCB).

(2) Grand Rapids Twp contributed \$5,600 in 2012 Rate Study for 2013 sewer revenue requirements & rates.

DISCLOSE RELIEF PROVIDED BY CITY & CUSTOMER COMMUNITY CIRCUIT BREAKER (CCCCB)

	WATER		SEWER	
	AMOUNT	PERCENT	AMOUNT	PERCENT
SYSTEM CHANGE- ABOVE	\$ (1,735,395)	-4.30%	\$ 1,177,402	2.46%
ADD: CCCCCB RELIEF	168,143	0.42%	133,698	0.28%
SYSTEM CHANGE- WITHOUT RELIEF	<u>\$ (1,567,252)</u>	<u>-3.88%</u>	<u>\$ 1,311,100</u>	<u>2.74%</u>

CITY OF GRAND RAPIDS, MICHIGAN
2013 PRELIMINARY WATER/SEWER RATE STUDY
IMPACT OF RATE ADJUSTMENTS ON DOMESTIC USERS
BY CUSTOMER COMMUNITY *
November 13, 2013

	APPROXIMATE QUARTERLY BILL		CHANGE	
	2013	2014	DOLLARS	PERCENT
GRAND RAPIDS				
WATER	\$ 74.22	\$ 71.00	\$ (3.22)	-4.34%
SEWER	91.73	94.56	2.83	3.09%
	<u>\$ 165.95</u>	<u>\$ 165.56</u>	<u>\$ (0.39)</u>	-0.24%
BASE RATIO	1.00	1.00		
WALKER				
WATER	\$ 78.37	\$ 74.95	\$ (3.42)	-4.36%
SEWER	129.28	132.10	2.82	2.18%
	<u>\$ 207.65</u>	<u>\$ 207.05</u>	<u>\$ (0.60)</u>	-0.29%
RATIO TO GR	1.25	1.25		
KENTWOOD				
WATER	\$ 85.30	\$ 80.06	\$ (5.24)	-6.14%
SEWER	55.85	56.96	1.11	1.99%
	<u>\$ 141.15</u>	<u>\$ 137.02</u>	<u>\$ (4.13)</u>	-2.93%
RATIO TO GR	0.85	0.83		
CASCADE TWP				
WATER	\$ 115.14	\$ 110.02	\$ (5.12)	-4.45%
SEWER	131.05	134.21	3.16	2.41%
	<u>\$ 246.19</u>	<u>\$ 244.23</u>	<u>\$ (1.96)</u>	-0.80%
RATIO TO GR	1.48	1.48		
GRAND RAPIDS TWP- Contribution of \$5,600 for 2013, \$0 for 2014.				
WATER	\$ 91.25	\$ 86.97	\$ (4.28)	-4.69%
SEWER	116.46	119.46	3.00	2.58%
	<u>\$ 207.71</u>	<u>\$ 206.43</u>	<u>\$ (1.28)</u>	-0.62%
RATIO TO GR	1.25	1.25		
TALLMADGE TWP				
WATER	\$ 114.22	\$ 108.56	\$ (5.66)	-4.96%
SEWER	261.35	268.08	6.73	2.58%
	<u>\$ 375.57</u>	<u>\$ 376.64</u>	<u>\$ 1.07</u>	0.28%
RATIO TO GR	2.26	2.27		

* THE COMPARISONS ABOVE ARE BASED ON SYSTEM AVERAGE DOMESTIC CUSTOMER
QUARTERLY CONSUMPTION OF : WATER- 25.00 UNITS OR 18,700 GALLONS
SEWER - 16.00 UNITS OR 11,968 GALLONS
NO. OF MONTHS: 3

Note: The average water consumption depicted above reflects an increase of two (2) units from last year's rate study.
Sewer reflects a decrease of two (2) units from last year's rate study (the average quarterly consumption for water
and sewer last year was 23 and 18 units, respectively).

REU (RESIDENTIAL EQUIVALENT UNIT) CUSTOMER COMMUNITY- APPROXIMATE QUARTERLY BILL

WRIGHT TWP- Contribution of \$0 for 2013, \$0 for 2014.

SEWER (No. of REU 1.00)	<u>\$ 185.64</u>	<u>\$ 190.74</u>	<u>\$ 5.10</u>	2.75%
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CITY OF GRAND RAPIDS, MICHIGAN
2013 PRELIMINARY WATER/SEWER RATE STUDY
IMPACT OF RATE ADJUSTMENTS ON WHOLESALE USERS
November 13, 2013

	<u>2013</u>	<u>2014</u>	<u>PERCENTAGE CHANGE</u>
EAST GRAND RAPIDS			
WATER - SERVICE (MONTHLY)	\$ 15,702.00	\$ 14,091.00	-10.26%
- COMMODITY (100 CF)	1.18	1.12	-5.08%
SEWER - SERVICE (MONTHLY)	1,604.00	1,540.00	-3.99%
- COMMODITY (MG)	1,396.00	1,558.00	11.60%
 ADA TWP			
WATER - SERVICE	\$ 34,722.00	\$ 29,726.00	-14.39%
- COMMODITY	1.30	1.25	-3.85%
SEWER - SERVICE	45,912.00	42,700.00	-7.00%
- COMMODITY	1,763.00	1,975.00	12.02%
 OTTAWA COUNTY			
WATER - SERVICE	\$ 170.00	\$ -	-100.00%
- COMMODITY	1.26	1.22	-3.17%
 GAINES TWP			
SEWER - SERVICE	\$ 1,574.00	\$ 1,333.00	-15.31%
- COMMODITY	1,310.00	1,387.00	5.88%

PROPOSED GRAND RAPIDS ORDINANCE

***82966** Com. Shaffer, supported by Com. Bliss, moved adoption of the following resolution under the Consent Agenda:

RESOLVED:

1. The attached Ordinance amending Sections 2.34(2), 2.35(1), 2.40, 2.41.1, 2.41.2, and 2.45 to Chapter 26, Title II of the Grand Rapids City Code be published as part of the Proceedings.
2. As authorized by Article V, Sec. 10(b) of the City Charter, the attached summary of the proposed Ordinance be published in a newspaper of general circulation in lieu of publishing the full text thereof.
3. A public hearing be held on the proposed Ordinance on December 3, 2013, at 7:00 p.m. in the Commission Chambers on the ninth floor of City Hall.
4. The proposed ordinance be considered for adoption on December 17, 2013.
5. The City Clerk provide all notices of the public hearing as required by law.

SUMMARY OF ORDINANCE 2013-_____

This Ordinance amends Sections 2.34(2), 2.35(1), 2.40, 2.41.1, 2.41.2, and 2.45 to Chapter 26, Title II of the Grand Rapids City Code entitled "City Water System".

The proposed amendment to the Water Rates and Charges will do the following:

- Amend the front foot rate for a Domestic user from \$75.00 to \$78.00;
- Amend the front foot rate for a Commercial or Industrial user for a line larger than eight inches in diameter from \$110.00 to \$103.00;
- Amend the Integrated Water Connection Base Fee Schedule as detailed:

Water Meter Size (inches)	01/01/13	01/01/14
3/4 or less	\$2,830	\$2,873
1	4,730	4,798
1 1/2	9,420	9,567
2	15,080	15,313
3	33,030	33,528
4	59,430	60,333
6 and over	132,080	134,083

- Amend the commodity rate for retail domestic, commercial and industrial users within the City of Grand Rapids from \$1.77 to \$1.70 per 100 cubic feet;
- Amend the monthly service charge for all users as detailed:

Water Meter Size (inches)	01/01/13	01/01/14
3/4 or less	\$9.99	\$9.50
1	15.18	14.66
1 1/4	21.85	21.29
1 1/2	30.00	29.39
2	50.75	50.02
3	110.04	108.95
4	193.04	191.46
6 or larger	430.20	427.19

- Amend the charges for water service lines as detailed:

		50 Ft. R.O.W.	60 Ft. R.O.W.	66 Ft. R.O.W.	80 Ft. R.O.W.	100 Ft. R.O.W.
Cost for 1"	2013	\$2,050	\$2,400	\$2,550	\$3,000	\$3,600
Water Service	2014	2,250	2,600	2,800	3,200	3,900
Cost for 1 1/2"	2013	3,000	3,400	3,700	4,200	5,000
Water Service	2014	3,100	3,500	3,750	4,400	5,200
Cost for 2"	2013	3,500	3,900	4,200	4,750	5,600
Water Service	2014	3,550	3,900	4,300	4,800	5,800

- Add to and amend the frozen/damaged/missing meter charges as detailed:

Water Meter Size (inches)	Fee (\$)
1-1/2" Omni	\$820
2" Omni	950
3" Omni	1,170
4" Omni	2,205
6" or larger	3,530

- Amend the wording from "Final Reading" to "Final or Actual Reading" under meter services;
- Amend the average quarterly bill from \$187.20 to \$181.44 and the minimum charge(s) from \$577.86 to \$544.32 under security deposit;
- Amend the wording from "Processing for shut-off (non-payment, cross connection)" to "Processing for shut-off (Administration Fee) (non-payment, cross connection)" under penalties;
- Amend the wording at conclusion of the penalties from "**Penalty will double with each subsequent infraction and/or litigation" to "**Penalties shall double with each subsequent infraction;"
- Amend the watermain oversizing rates as detailed:

	01/01/13	01/01/14
Description	Amount per lineal foot	Amount per lineal foot
8" to 12"	\$14.84	\$16.56
12" to 16"	20.51	21.78
8" to 16"	35.35	38.35

- Establish the Individual Circuit Breaker (ICB) program for calendar 2014 at \$148,743;
- These proposed amendments shall be effective on January 1, 2014.

NOTICE

Copies of this Ordinance are available for review and distribution from the Office of the City Clerk, 300 Monroe Ave., NW, Grand Rapids, MI 49503.

The City Commission will hold a public hearing on the proposed Ordinance changes on December 3, 2013, at 7:00 p.m. in the Commission Chambers on the ninth floor of City Hall.

AN ORDINANCE TO AMEND SECTIONS 2.34(2), 2.35(1), 2.40, 2.41.1, 2.41.2, and 2.45 TO CHAPTER 26 OF TITLE II OF THE CODE OF THE CITY OF GRAND RAPIDS AMENDING THE WATER RATES AND CHARGES

ORDINANCE NO. 2013-_____

THE PEOPLE OF THE CITY OF GRAND RAPIDS DO ORDAIN:

Section 1. That Section 2.34(2) of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"(2) The charge shall be known as the front foot rate and be determined by multiplying the rate per foot by the number of feet the property owner has fronting on the watermain used for local distribution. The front foot rate shall be as follows:

- (a) Domestic User: \$78.00;
- (b) Commercial or Industrial User;
 1. The same as a domestic user if the connection is made to a line eight (8) inches or less in diameter.
 2. For a line larger than eight (8) inches in diameter: \$103.00.

This charge will be annually reviewed and may change to reflect the current average cost of installation of local distribution lines."

Section 2. That Section 2.35(1) of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"(1) When a property owner or user is requested or required to connect to the System and has not previously paid or been assessed a connection fee, the following connection fee schedule shall apply:

Integrated Water Connection Base Fee Schedule

Water Meter (or equivalent) Size (inches)	Base Fee
3/4 or less	\$2,873
1	4,798
1 ½	9,567
2	15,313
3	33,528
4	60,333
6 and over	134,083"

Section 3. That Section 2.40 of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.40 Rates and Charges for Retail Customers Within the City of Grand Rapids.

The following charges for water service provided retail users within the City of Grand Rapids shall be made.

Commodity Rate

Domestic	\$1.70 per 100 cubic feet
Commercial	\$1.70 per 100 cubic feet
Industrial	\$1.70 per 100 cubic feet

Monthly Service Charge

Size of Meter	Charge
3/4 inch or less	\$9.50
1 inch	14.66
1 1/4 inch	21.29
1 1/2 inch	29.39
2 inches	50.02
3 inches	108.95
4 inches	191.46
6 inches or larger	427.19"

Section 4. That Section 2.41.1 of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"Sec. 2.41.1 Miscellaneous Charges.

(1) Water Service Pipe Costs, as reflected in Task #29 of the 2013 Water Rate Study:

		50 Ft. R.O.W.	60 Ft. R.O.W.	66 Ft. R.O.W.	80 Ft. R.O.W.	100 Ft. R.O.W.
Cost for 1"	2013	\$2,050	\$2,400	\$2,550	\$3,000	\$3,600
Water Service	2014	\$2,250	\$2,600	\$2,800	\$3,200	\$3,900
Cost for 1 1/2"	2013	\$3,000	\$3,400	\$3,700	\$4,200	\$5,000
Water Service	2014	\$3,100	\$3,500	\$3,750	\$4,400	\$5,200
Cost for 2"	2013	\$3,500	\$3,900	\$4,200	\$4,750	\$5,600
Water Service	2014	\$3,550	\$3,900	\$4,300	\$4,800	\$5,800

(2) Miscellaneous Charges, as reflected in Task #30 of the 2013 Water Rate Study:

(a) Hydrant Use Permits

Weekly Pool Filling Permit	\$75/wk + \$300 refundable deposit
Contractor Seasonal (Winter or Summer)	
Hydrant Connection Permit	\$75/wk + \$300 non-refundable fee
Tanker Hydrant Connection Permit	\$25/week + metered volume
	(based on average retail commodity rate)
	+ \$300 non-refundable fee
Hydrant Flow Test.....	\$200 fee

(b) Tapping Permits

<u>Connection Size</u>	<u>Fee</u>
2" and smaller	\$225.00
3" and larger	Cost

(c) Meter Installation and Seasonal Turn Off/On Fees

<u>Meter Size</u>	<u>Fee</u>
3/4" or smaller	\$40.00
1"	45.00
1-1/2"	55.00
2"	60.00
3"	100.00
4"	200.00
6" and larger	250.00

(d) Frozen/Damaged /Missing Meter Charges

<u>Meter Size</u>	<u>Fee</u>
3/4" or smaller	\$150.00
1"	200.00
1-1/2" ECR	350.00
1-1/2" Turbo	500.00
1-1/2" Omni	820.00
2" ECR	450.00
2" Turbo	575.00
2" Omni	950.00
3" Turbo	750.00
3" Omni	1170.00
4" Omni	2205.00
6" and larger	3530.00

(e) Meter Services

Final or Actual Reading..... \$35.00

Meter Testing Fee

(paid by customer if meter is accurate, no charge to customer if meter is faulty)

5/8 – 1" Meter	50.00
1-1/2 – 2" Meter	75.00
3-6" Meter	Cost

(f) Security Deposit

Three (3) times average quarterly bill (\$181.44) \$544.32

(g) Miscellaneous Permits

Street opening permit.....	\$30.00
Water inspection permit (each inspection within the City)	\$40.00
Water inspection permit (each inspection outside the City).....	\$55.00
Sanitary Service line inspection permit (each inspection within city)	\$40.00
Sanitary Service line inspection permit (each outside city)	\$55.00
Storm service line inspection permit (each inspection within city).....	\$40.00
Storm Service line inspection permit (each outside City)	\$55.00
Plumbing service re-inspection fee.....	\$40.00
Cross Connection re-inspection fee.....	\$75.00
Sewer Lateral service Demolition/Cap off inspection fee (each within city).....	\$40.00
Sewer Lateral Service Demolition/Cap off inspection fee (each outside city)	\$55.00
Footing Drain Lateral Inspection Permit (each within City).....	\$40.00
Footing Drain Lateral Inspection Permit (each outside City)	\$55.00

(h) Service Fee

Customer-requested on-site service (non-scheduled appointment-customer issue only)	\$55.00
Turn-on/turn-off water for real-estate inspections	\$110.00

(i) Penalties

Late-payment penalty	10% of net
Processing for shut-off (Administration Fee) (non-payment, cross connection).....	\$55.00
Penalty for failure to keep appointment	\$35.00
Penalty for each missed appointment thereafter (related to same service)	\$50.00
Unauthorized operation of valves	\$100.00*
(plus double the commodity rate for estimated volume)	
Unauthorized use of connection pipes for fire protection	\$100.00*
(plus double the commodity rate for estimated volume)	
Unauthorized opening of by-pass valve/tampering	\$100.00*
(plus double the commodity rate for estimated volume)	
Unauthorized use of a hydrant/water	\$500.00
Use of illegal connection on hydrant (including loss of connection).....	\$500.00
Failure to return hydrant connection equipment (plus number of weeks equipment used/missing).....	\$500.00
Return of damaged hydrant connection equipment.....	\$500.00
Lost/non-returned hydrant wrench.....	\$50.00
Permit infractions/violations	\$100.00*
(plus double with each subsequent infraction).....	\$100.00
Returned check charge (verified with City Treasurer 8/23/10)	\$30.00
Unauthorized service tap of watermain (fine per tap plus tapping permit fee for each tap)	\$500.00

**Penalties shall double with each subsequent infraction.*

(3) Watermain Oversizing Rates, as reflected in Task #32 of the 2013 Water Rate Study:

8 inch to 12 inch	\$16.56 per lineal foot
12 inch to 16 inch	\$21.78 per lineal foot
8 inch to 16 inch	\$38.35 per lineal foot"

Section 5. That Section 2.41.2 of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"Sec. 2.41.2 Circuit Breaker

As agreed among the customer communities per the uniform water and sewer service agreement, the Individual Circuit Breaker (ICB) and City and Customer Community Circuit Breaker programs have been established in order to relieve hardship. The former program serves to assist eligible water customers, and the latter program serves to normalize rates among customer communities to the extent that funds are available for such purpose. These programs shall be administered according to the terms of the uniform water and sewer service agreement. The amount allocated for this purpose shall not exceed:

<u>Year</u>	<u>Circuit Breaker Allocation</u>
2014	\$148,743"

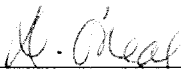
Section 6. That Section 2.45 of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"Sec. 2.45 Effective Date

The rates, charges, and fees set forth in Section 2.34(2), 2.35(1), 2.40, 2.41.1, 2.41.2, and 2.45 shall be effective on January 1, 2014."

* CONSENT AGENDA APPROVAL

I hereby certify that the foregoing is a true transcript of the action of the City Commission of the City of Grand Rapids, Michigan, in public session held November 19, 2013.



Darlene O'Neal, Acting City Clerk

PROPOSED GRAND RAPIDS ORDINANCE

*82967 Com. Shaffer, supported by Com. Bliss, moved adoption of the following resolution under the Consent Agenda:

RESOLVED:

1. The attached Ordinance amending Sections 2.95(2), 2.96(1), 2.101, 2.102, 2.102.1, and 2.105 to Chapter 27, Title II of the Grand Rapids City Code be published as part of the Proceedings.
2. As authorized by Article V, Sec. 10(b) of the City Charter, the attached summary of the proposed Ordinance be published in a newspaper of general circulation in lieu of publishing the full text thereof.
3. A public hearing be held on the proposed Ordinance on December 3, 2013, at 7:00 p.m. in the Commission Chambers on the ninth floor of City Hall.
4. The proposed ordinance be considered for adoption on December 17, 2013.
5. The City Clerk provide all notices of the public hearing as required by law.

SUMMARY OF ORDINANCE 2013-_____

This Ordinance amends Sections 2.95(2), 2.96(1), 2.101, 2.102, 2.102.1, and 2.105 to Chapter 27, Title II of the Grand Rapids City Code entitled "City Sewage Disposal System".

The proposed amendment to the Sewer Rates and Charges will do the following:

- Amend the front foot rate for a Domestic user from \$70.00 to \$80.00;
- Amend the front foot rate for a Commercial or Industrial user for a line larger than eight inches in diameter from \$104.00 to \$109.00;
- Amend the Integrated Sewer Connection Base Fee Schedule as detailed:

Water Meter Size (inches)	1/01/13	1/01/14
3/4 or less	\$2,830	\$2,873
1	4,730	4,798
1 1/2	9,420	9,567
2	15,080	15,313
3	33,030	33,528
4	59,430	60,333
6 and over	132,080	134,083

- Amend the commodity rate for retail domestic, commercial and industrial users within the City of Grand Rapids from \$3.26 to \$3.21 per 100 cubic feet;
- Amend the monthly service charge for all users as detailed:

Water Meter Size (inches)	01/01/13	01/01/14
3/4 or less	\$13.19	\$14.40
1	21.00	23.36
1 1/4	31.04	34.88
1 1/2	43.31	48.96
2	74.55	84.80
3	163.79	187.20
4	288.73	330.56
6 or larger	645.71	740.16

- Amend surcharges as detailed:

Surcharge	2013 Rate	2014 Rate
BOD	\$0.193	\$0.215
TSS	0.277	0.338
phosphorus	2.158	2.062
ammonia	0.294	0.295

- Amend the vehicle charge on the schedule of charges that apply to any analysis which may be required as a part of a Significant Industrial User Discharge Permit from \$3.78 per hour to \$4.01 per hour;
- Amend the charges for sewer laterals as detailed:

		50 Ft. R.O.W.	60 Ft. R.O.W.	66 Ft. R.O.W.	80 Ft. R.O.W.	100 Ft. R.O.W.
Cost for 6"	2013	\$2,150	\$2,550	\$2,800	\$3,350	\$4,100
Lateral	2014	2,400	2,850	3,100	3,650	4,500

- Amend the sewer oversizing rates as detailed:

	01/01/13	01/01/14
Description	Amount per lineal foot	Amount per lineal foot
8" to 10"	\$6.47	\$6.62
8" to 12"	11.56	12.14
8" to 15"	21.18	21.83
10" to 12"	5.09	5.52
10" to 15"	14.71	15.21
12" to 15"	9.62	9.69

- Amend the charge for non-compliance with the footing drain disconnection ordinance (FDD Opt Out Charge) from \$73.20 to \$73.40;
- These proposed amendments shall be effective on January 1, 2014.

NOTICE

Copies of this Ordinance are available for review and distribution from the Office of the City Clerk, 300 Monroe Ave., NW, Grand Rapids, MI 49503.

The City Commission will hold a public hearing on the proposed Ordinance changes on December 3, 2013, at 7:00 p.m. in the Commission Chambers on the ninth floor of City Hall.

AN ORDINANCE TO AMEND SECTIONS 2.95(2), 2.96(1), 2.101, 2.102, 2.102.1, and 2.105 TO CHAPTER 27 OF TITLE II OF THE CODE OF THE CITY OF GRAND RAPIDS, AMENDING THE SEWER RATES AND CHARGES

ORDINANCE NO. 2013-_____

THE PEOPLE OF THE CITY OF GRAND RAPIDS DO ORDAIN:

Section 1. That Section 2.95(2) of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

“(2) The charge shall be known as the front foot rate and be determined by multiplying the rate per foot by the number of feet the property owner has fronting on the local collector sewer line from which he or she will receive service. The front foot rate shall be as follows:

- (a) Domestic User: \$80.00;
- (b) Commercial or Industrial User;
 1. The same as a domestic user if the connection is made to a local collector sewer line eight (8) inches or less in diameter.
 2. For a line larger than eight (8) inches in diameter: \$109.00.

This charge will be annually reviewed and may change to reflect the current average cost of installation of local collector sewer lines.”

Section 2. That Section 2.96(1) of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

“(1) When a property owner or user is requested or required to connect to the System and has not previously paid or been assessed a connection fee, the following connection fee schedule shall apply:

Integrated Sewer Connection Base Fee Schedule

Water Meter (or equivalent)	
<u>Size (inches)</u>	<u>Base Fee</u>
3/4 or less	\$2,873
1	\$4,798
1 ½	\$9,567
2	\$15,313
3	\$33,528
4	\$60,333
6 and over	\$134,083”

Section 3. That Section 2.101 of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

“2.101 Rates and Charges for Retail Users Within the City of Grand Rapids.

The following rates and charges for sewage disposal service shall apply for users within the City of Grand Rapids:

	<u>Commodity Rate</u>
Domestic	\$3.21 per 100 cubic feet
Commercial	\$3.21 per 100 cubic feet
Industrial	\$3.21 per 100 cubic feet

Monthly Service Charge

<u>Size of Meter</u>	<u>Charge</u>
3/4 inch or less	\$14.40
1 inch	23.36
1 1/4 inches	34.88
1 1/2 inches	48.96
2 inches	84.80
3 inches	187.20
4 inches	330.56
6 inches or larger	740.16”

Section 4. That Section 2.102 of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

“2.102 Surcharges and Permit Fees.

(1) If the City Manager determines that a discharge will not cause pass through or interference as defined in this Chapter, Industrial or Commercial users whether they are located within a retail service area or a bulk service area shall be charged a surcharge if the concentration of their discharge exceeds a five-day BOD of two hundred fifty (250) mg/l, and/or TSS of two hundred fifty (250) mg/l, or any phosphorus of fifteen (15) mg/l. That charge shall be twenty-one and five-tenth cents (\$0.215) per pound of BOD and thirty-three and eight-tenth cents (\$0.338) per pound of TSS and two dollars and six and

two-tenth cents (\$2.062) per pound of phosphorus in excess of the above limits. In addition, all industrial or commercial users shall be charged a surcharge for ammonia concentrations exceeding thirty-eight (38) mg/l. The charge shall be twenty nine and five-tenth cents (\$0.295) per pound of ammonia in excess of the above limit. Discharge concentrations of these substances and the resulting surcharge shall be based on at least three composite samples per quarter. This sampling shall be performed by either the City or the Industrial User as determined by the City Manager.

- (2) The fee for a Significant Industrial User Discharge Permit as provided for in Section 2.70 of this Chapter whether they are located within a retail service area or a bulk service area shall be four hundred dollars (\$400.00) per year and an analytical fee based upon Section 2.102(3).
- (3) The following schedule of charges shall apply to any analysis which may be required as a part of a Significant Industrial User Discharge Permit:

Metals	\$7.00 each
TSS	\$7.00 each
BOD	\$14.00 each
Total Phosphate	\$13.50 each
pH	\$5.00 each
EPA 624	\$60.00 each
EPA 625	\$115.00 each
BTEX/MTBE	\$35.00 each
Sulfide	\$12.00 each
Oil and Grease	\$25.00 each
Total Cyanide	\$15.00 each
Hexavalent Chromium	\$10.00 each
Fecal Coliform	\$25.00 each
Mercury	\$15.00 each
Ammonia	\$9.00 each
Labor	\$57.57 hour
Sampler	\$35.00 day
Vehicle	\$4.01 hour

- (4) These charges will be reviewed annually and may change to reflect the current cost of providing these services."

Section 5. That Section 2.102.1 of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"Sec. 2.102.1 Miscellaneous Charges

- (1) **Sewer Lateral Charges**, as reflected in Task #29 of the 2013 Sewer Rate Study:

<u>R.O.W. WIDTH</u>	<u>COST FOR 6-INCH LATERAL</u>	
	<u>2013</u>	<u>2014</u>
50 ft.	\$2,150	\$2,400
60 ft.	\$2,550	\$2,850
66 ft.	\$2,800	\$3,100
80 ft.	\$3,350	\$3,650
100 ft.	\$4,100	\$4,500

- (2) **Sewer Oversizing Rates**, as reflected in Task #32 of the 2013 Sewer Rate Study:

<u>Description</u>	<u>Amount (per lineal foot)</u>
8" to 10"	\$6.62
8" to 12"	\$12.14
8" to 15"	\$21.83
10" to 12"	\$5.52
10" to 15"	\$15.21
12" to 15"	\$9.69

(3) Footing Drain Disconnect Opt Out Charge, as reflected in Task #35 of the 2013 Sewer Rate Study, and as authorized by Section 2.115 of this Code:

\$73.40/customer/month"

Section 6. That Section 2.105 of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"Sec. 2.105 Effective Date

The rates, charges, and fees set forth in Section 2.95(2), 2.96(1), 2.101, 2.102, 2.102.1, and 2.105 shall be effective on January 1, 2014."

* CONSENT AGENDA APPROVAL

I hereby certify that the foregoing is a true transcript of the action of the City Commission of the City of Grand Rapids, Michigan, in public session held November 19, 2013.



Darlene O'Neal, Acting City Clerk

NOTICE OF PUBLIC HEARING

STATE OF MICHIGAN)
County of Kent

ss. Deja McHenry

Being duly sworn deposes and say he/she is Principal Clerk of



THE GRAND RAPIDS PRESS
DAILY EDITION

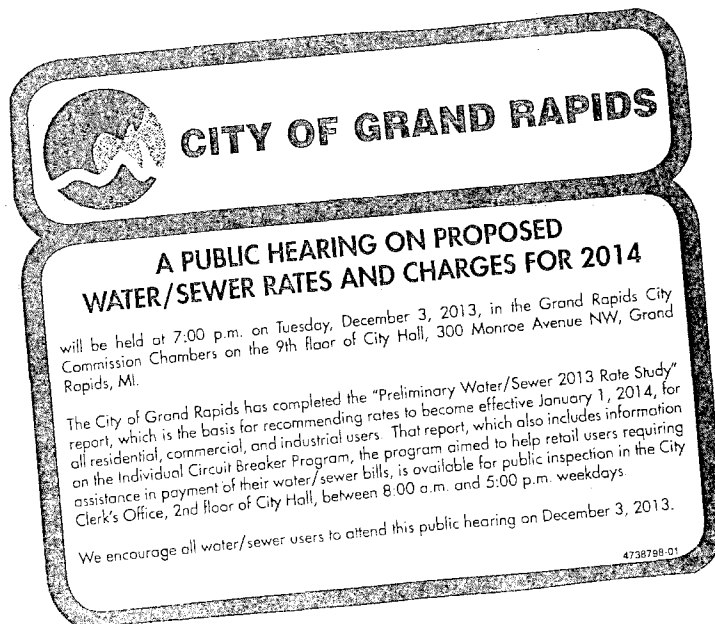
a newspaper published and circulated in the County of Kent and otherwise qualified according to Supreme Court Rule; and that the annexed notice, taken from said paper, has been duly published in said paper on the following day(days) _____

November 24 A.D. 20 13

Sworn to and subscribed before me this 25 day of November 2013

Janice M. Ringler

JANICE M. RINGLER
Notary Public, State of Michigan
County of Kent
My Commission Expires: 10/03/2014
Acting in the County of Kent



NOTICE OF PUBLIC HEARING

THE GRAND RAPIDS PRESS / SUNDAY, NOVEMBER 24, 2013 / A15

Local

GRAND RAPIDS

Founders CEO: Laid-off MillerCoors employees calling us for jobs

By Garrett Ellison
gellison@mrpress.com

In October, beer industry giant MillerCoors announced it was cutting 200 salaried employees and not filling another 160 open salaried positions. That's not surprising if some of those folks find new jobs with Michigan craft brewers, said one state industry leader.



Stevens

"We're getting a lot of those folks reaching out to us," said Mike Stevens, CEO

of Founders Brewing Co. in Grand Rapids, who characterized the employment interest as coming from those seeking "upper-level management positions."

"Craft beer is no longer the little baby anymore," said Stevens, who spoke during a beer, wine and food industry panel discussion Monday at the Grand Rapids Economic Club luncheon.

"There are folks out there in the big brewery world who are seeking us," according to the Milwaukee Business Journal. MillerCoors is cutting employees as part of a worldwide restructuring designed to help the company

70%
Surge in output
in 2014 expected
by Founders Brewing

5.8%
Second-quarter
income drop
by MillerCoors

"achieve its operating margin and profitability goals."

MillerCoors' second-quarter income dropped 5.8 percent because of declining sales for its two largest brands, Coors Light and Miller Lite, the Milwaukee Journal Sentinel reports.

It's a sign of the times for

mega-brewers, which have been watching the craft segment of the beer industry enjoy double-digit growth in recent years while overall beer consumption is on the decline nationwide.

In March, a California investment bank report projected craft beer will represent almost 15 percent of the total U.S. beer market by

2020. It is about 6 percent. The shakeup has caused companies such as MillerCoors, justly owned by London-based SABMiller and Molson Coors Brewing, to step up marketing of artisanal brands such as Blue Moon, a signature of the company's Tenby & Hyde division.

Independent craft brewery owners such as Stevens are exactly shedding sales over the U.S. market share decline for mega-brewers such as MillerCoors and AB InBev, which have been focused lately on growing markets overseas, instead.

"America's got a new beer and it's called craft," Stevens

said.

Founders, which recently completed a \$25 million expansion of its brew-house, cellar and taproom, is eyeing a 70 percent surge in output next year and a list on the list of the Top 20 largest craft breweries in the U.S., Stevens said.

In 2014, the brewery plans to distribute in 20 states and almost a dozen countries. The brewery expects to hire 40 employees next year, and he said the company has made it the point where it needs to bring in higher-level skill sets by advertising for sales and marketing positions around the country.

LOCAL

'Cleaner than clean'

Going behind the scenes at LG Chem's battery plant

Jim Harger
jharger@mrpress.com



You want it to be cleaner than clean if you're building a car battery that will power a 3,800-pound Chevrolet Volt down the road for 25 to 50 miles without a recharge.

And if you've figured out how to do it on a large scale, you also don't want a bunch of journalists taking pictures so everyone can see how you do it.

So it was Thursday morning when I joined a small group of reporters for a tour of the big white LG Chem plant at 875 E. 48th Street in Holland.

We donned slick white lab coats, put booties over our shoes, and surrendered our camera phones and electronic gear for the rare invitation-only tour.

It was part of LG Chem Power Inc.'s celebration of its first shipment of lithium ion batteries for the Chevrolet Volt. Previous batteries for the electric-powered car have been flown in from LG Chem's factories in Korea.

Once we were dressed for the tour, senior engineer Aaron Strach led us through long white-walled hallways with polished green ceramic floors to the air shower, a small room whose walls were dotted with air nozzles that blow off whatever comes we might have been carrying. Our first stop was in the "slitting room," where giant rolls of coated aluminum are precisely cut into smaller rolls by glass-enclosed machines whose every move was recorded and inspected by high-speed cameras.

Those glass-enclosed machines and cameras were present in almost every room we entered, from the drying room where ovens removed all the moisture from the rolls to the lamination room, which was as long as a football field.

In the lamination room, machines notched, trimmed, folded, bonded and laminated the rolls into notepad-sized battery cells that were sealed, punched and barreled before

they were put into a large three-story room, where they got their first shot of electricity.

"We're cleaning the equipment more than once a day," Strach said, as workers wearing masks over their mouths made minor adjustments to the machines. "Meltsure and dirt is the enemy of the cell."

From there, it was off to a storage room where the battery cells are racked for a 30-day "aging" process designed to make sure they are able to hold their power for extended periods.

The cells then are assembled into battery packs that include 288 cells for the Volt. Each of the T-shaped battery packs that are mounted into the center of the car weigh about 440 pounds.

After the hour-long tour, there was no need to turn on their slippers when we left. There was little chance any of us picked up a micron of dust or dirt on the inside.

"If people saw the technology behind these cells, they would recognize this is one of the most advanced battery plants in the world," said Randy Thelen, head of Lakeshore Advantage, the economic development group that helped recruit the \$200 million plant to Holland.

Despite a slow start in sales for the Volt, LG Chem officials said they expect demand for their batteries to continue to grow in the U.S. market. As that demand grows, so will LG Chem's operations in Holland.

During the tour, Chief Financial Officer David Lee pointed to a aerial photo of the 122-acre Holland plant site and noted there is room for three similarly sized plants.

"Nobody knows how long it will take," Lee said. "Based on our experience in Korea and China, it will not take very long."

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CITY OF GRAND RAPIDS

A PUBLIC HEARING ON PROPOSED WATER/SEWER RATES AND CHARGES FOR 2014

will be held at 7:00 p.m. on Tuesday, December 2, 2013, in the Grand Rapids City Convention Center on the 19th floor of City Hall, 300 Monroe Avenue NW, Grand Rapids, MI.

The City of Grand Rapids has completed the "Midwest Water Users 2013 Rate Study" report, which is the basis for recommending rates to be effective January 1, 2014. For additional information and input, the City is holding a public hearing on the proposed rates. The public hearing is open to all interested parties. The public hearing is held on Tuesday, December 2, 2013, at 7:00 p.m. in the Grand Rapids City Convention Center on the 19th floor of City Hall, 300 Monroe Avenue NW, Grand Rapids, MI.

This is a public hearing and is open to all interested parties. The public hearing is held on Tuesday, December 2, 2013, at 7:00 p.m. in the Grand Rapids City Convention Center on the 19th floor of City Hall, 300 Monroe Avenue NW, Grand Rapids, MI.

PUBLIC HEARINGS - GRAND RAPIDS ORDINANCE

83020 Pursuant to Commission File No. 82966, dated November 19, 2013, a public hearing was held on this date to consider an amendment to Chapter 26, Title II of the Code of the City of Grand Rapids (Water Rates and Charges).

At the conclusion of said hearing, the Mayor declared the hearing closed and referred the matter to the Committee of the Whole.

I hereby certify that the foregoing is a true transcript of the action of the City Commission of the City of Grand Rapids, Michigan, in public session held December 3, 2013.



Darlene O'Neal, Acting City Clerk

PUBLIC HEARINGS - GRAND RAPIDS ORDINANCE

83021 Pursuant to Commission File No. 82967, dated November 19, 2013, a public hearing was held on this date to consider an amendment to Chapter 27, Title II of the Code of the City of Grand Rapids (Sewer Rates and Charges).

At the conclusion of said hearing, the Mayor declared the hearing closed and referred the matter to the Committee of the Whole.

I hereby certify that the foregoing is a true transcript of the action of the City Commission of the City of Grand Rapids, Michigan, in public session held December 3, 2013.



Darlene O'Neal, Acting City Clerk

FINAL ADOPTION OF RATE ORDINANCE

83032 An Ordinance to amend Chapter 26 of Title II of the City Code amending Water Rates and Charges was presented to the City Commission on November 19, 2013 under File No. 82966 and a public hearing was held on December 3, 2013 under File No. 83020. The aforementioned ordinance shall be considered for adoption this date.

Com. White, supported by Com. Bliss, moved adoption of the following ordinance:

**AN ORDINANCE TO AMEND SECTIONS 2.34(2), 2.35(1),
2.40, 2.41.1, 2.41.2, and 2.45 TO CHAPTER 26 OF TITLE II
OF THE CODE OF THE CITY OF GRAND RAPIDS
AMENDING THE WATER RATES AND CHARGES**

ORDINANCE NO. 2013-86

THE PEOPLE OF THE CITY OF GRAND RAPIDS DO ORDAIN:

Section 1. That Section 2.34(2) of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"(2) The charge shall be known as the front foot rate and be determined by multiplying the rate per foot by the number of feet the property owner has fronting on the watermain used for local distribution. The front foot rate shall be as follows:

(a) Domestic User: \$78.00;

(b) Commercial or Industrial User;

1. The same as a domestic user if the connection is made to a line eight (8) inches or less in diameter.

2. For a line larger than eight (8) inches in diameter: \$103.00.

This charge will be annually reviewed and may change to reflect the current average cost of installation of local distribution lines."

Section 2. That Section 2.35(1) of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"(1) When a property owner or user is requested or required to connect to the System and has not previously paid or been assessed a connection fee, the following connection fee schedule shall apply:

Integrated Water Connection Base Fee Schedule

Water Meter (or equivalent) <u>Size (inches)</u>	<u>Base Fee</u>
3/4 or less	\$2,873
1	4,798
1 ½	9,567
2	15,313
3	33,528
4	60,333
6 and over	134,083"

Section 3. That Section 2.40 of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.40 Rates and Charges for Retail Customers Within the City of Grand Rapids.

The following charges for water service provided retail users within the City of Grand Rapids shall be made.

Commodity Rate

Domestic \$1.70 per 100 cubic feet
Commercial \$1.70 per 100 cubic feet
Industrial \$1.70 per 100 cubic feet

Monthly Service Charge

<u>Size of Meter</u>	<u>Charge</u>
3/4 inch or less	\$9.50
1 inch	14.66
1 1/4 inch	21.29
1 1/2 inch	29.39
2 inches	50.02
3 inches	108.95
4 inches	191.46
6 inches or larger	427.19"

Section 4. That Section 2.41.1 of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"Sec. 2.41.1 Miscellaneous Charges.

(1) Water Service Pipe Costs, as reflected in Task #29 of the 2013 Water Rate Study:

		50 Ft.	60 Ft.	66 Ft.	80 Ft.	100 Ft.
		R.O.W.	R.O.W.	R.O.W.	R.O.W.	R.O.W.
Cost for 1"	2013	\$2,050	\$2,400	\$2,550	\$3,000	\$3,600
Water Service	2014	\$2,250	\$2,600	\$2,800	\$3,200	\$3,900
Cost for 1 1/2"	2013	\$3,000	\$3,400	\$3,700	\$4,200	\$5,000
Water Service	2014	\$3,100	\$3,500	\$3,750	\$4,400	\$5,200
Cost for 2"	2013	\$3,500	\$3,900	\$4,200	\$4,750	\$5,600
Water Service	2014	\$3,550	\$3,900	\$4,300	\$4,800	\$5,800

(2) Miscellaneous Charges, as reflected in Task #30 of the 2013 Water Rate Study:

(a) Hydrant Use Permits

Weekly Pool Filling Permit \$75/wk + \$300 refundable deposit
Contractor Seasonal (Winter or Summer)
Hydrant Connection Permit \$75/wk + \$300 non-refundable fee
Tanker Hydrant Connection Permit \$25/week + metered volume
(based on average retail commodity rate)
+ \$300 non-refundable fee
Hydrant Flow Test \$200 fee

(b) Tapping Permits

<u>Connection Size</u>	<u>Fee</u>
2" and smaller	\$225.00
3" and larger	Cost

(c) Meter Installation and Seasonal Turn Off/On Fees

<u>Meter Size</u>	<u>Fee</u>
3/4" or smaller	\$40.00
1"	45.00
1-1/2"	55.00
2"	60.00
3"	100.00
4"	200.00
6" and larger	250.00

(d) Frozen/Damaged/Missing Meter Charges

<u>Meter Size</u>	<u>Fee</u>
3/4" or smaller	\$150.00
1"	200.00
1-1/2" ECR	350.00
1-1/2" Turbo	500.00
1-1/2" Omni	820.00
2" ECR	450.00
2" Turbo	575.00
2" Omni	950.00
3" Turbo	750.00
3" Omni	1170.00
4" Omni	2205.00
6" and larger	3530.00

(e) Meter Services

Final or Actual Reading..... \$35.00

Meter Testing Fee

(paid by customer if meter is accurate, no charge to customer if meter is faulty)

5/8 – 1" Meter	50.00
1-1/2 – 2" Meter	75.00
3-6" Meter	Cost

(f) Security Deposit

Three (3) times average quarterly bill (\$181.44) \$544.32

(g) Miscellaneous Permits

Street opening permit.....	\$30.00
Water inspection permit (each inspection within the City)	\$40.00
Water inspection permit (each inspection outside the City).....	\$55.00
Sanitary Service line inspection permit (each inspection within city)	\$40.00
Sanitary Service line inspection permit (each outside city)	\$55.00
Storm Service line inspection permit (each inspection within city)	\$40.00
Storm Service line inspection permit (each outside City)	\$55.00
Plumbing Service re-inspection fee	\$40.00

Cross Connection re-inspection fee.....	\$75.00
Sewer Lateral Service Demolition/Cap off inspection fee (each within city).....	\$40.00
Sewer Lateral Service Demolition/Cap off inspection fee (each outside city)	\$55.00
Footing Drain Lateral Inspection Permit (each within City).....	\$40.00
Footing Drain Lateral Inspection Permit (each outside City)	\$55.00

(h) Service Fee

Customer-requested on-site service (non-scheduled appointment-customer issue only)	\$55.00
Turn-on/turn-off water for real-estate inspections	\$110.00

(i) Penalties

Late-payment penalty	10% of net
Processing for shut-off (Administration Fee) (non-payment, cross connection).....	\$55.00
Penalty for failure to keep appointment	\$35.00
Penalty for each missed appointment thereafter (related to same service).....	\$50.00
Unauthorized operation of valves	\$100.00*
(plus double the commodity rate for estimated volume)	
Unauthorized use of connection pipes for fire protection	\$100.00*
(plus double the commodity rate for estimated volume)	
Unauthorized opening of by-pass valve/tampering	\$100.00*
(plus double the commodity rate for estimated volume)	
Unauthorized use of a hydrant/water.....	\$500.00
Use of illegal connection on hydrant (including loss of connection).....	\$500.00
Failure to return hydrant connection equipment (plus number of weeks equipment used/missing)	\$500.00
Return of damaged hydrant connection equipment.....	\$500.00
Lost/non-returned hydrant wrench.....	\$50.00
Permit infractions/violations	\$100.00*
(plus double with each subsequent infraction)	\$100.00
Returned check charge (verified with City Treasurer 8/23/10)	\$30.00
Unauthorized service tap of watermain (fine per tap plus tapping permit fee for each tap)	\$500.00

**Penalties shall double with each subsequent infraction.*

(3) Watermain Oversizing Rates, as reflected in Task #32 of the 2013 Water Rate Study:

8 inch to 12 inch	\$16.56 per lineal foot
12 inch to 16 inch	\$21.78 per lineal foot
8 inch to 16 inch	\$38.35 per lineal foot"

Section 5. That Section 2.41.2 of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"Sec. 2.41.2 Circuit Breaker.

As agreed among the customer communities per the uniform water and sewer service agreement, the Individual Circuit Breaker (ICB) and City and Customer Community Circuit Breaker programs have been established in order to relieve hardship. The former program

serves to assist eligible water customers, and the latter program serves to normalize rates among customer communities to the extent that funds are available for such purpose. These programs shall be administered according to the terms of the uniform water and sewer service agreement. The amount allocated for this purpose shall not exceed:

<u>Year</u>	<u>Circuit Breaker Allocation</u>
2014	\$148,743"

Section 6. That Section 2.45 of Chapter 26 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"Sec. 2.45 Effective Date.


The rates, charges, and fees set forth in Section 2.34(2), 2.35(1), 2.40, 2.41.1, 2.41.2, and 2.45 shall be effective on January 1, 2014."

Carried by a roll call vote: Yeas: -6 Nays: -0

Com. White, supported by Com. Gutowski, moved that the ordinance take immediate effect pursuant to Section 9 of Title V of the City Charter.

Adopted: Yeas: -6 Nays: -0

I hereby certify that the foregoing is a true transcript of the action of the City Commission of the City of Grand Rapids, Michigan, in public session held December 17, 2013.



Darlene O'Neal, Acting City Clerk

FINAL ADOPTION OF RATE ORDINANCE

83033 An Ordinance to amend Chapter 27 of Title II of the City Code amending Sewer Rates and Charges was presented to the City Commission on November 19, 2013 under File No. 82967 and a public hearing was held on December 3, 2013 under File No. 83021. The aforementioned ordinance shall be considered for adoption this date.

Com. White, supported by Com. Bliss, moved adoption of the following ordinance:

**AN ORDINANCE TO AMEND SECTIONS 2.95(2), 2.96(1),
2.101, 2.102, 2.102.1, and 2.105 TO CHAPTER 27 OF TITLE II
OF THE CODE OF THE CITY OF GRAND RAPIDS,
AMENDING THE SEWER RATES AND CHARGES**

ORDINANCE NO. 2013-87

THE PEOPLE OF THE CITY OF GRAND RAPIDS DO ORDAIN:

Section 1. That Section 2.95(2) of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

“(2) The charge shall be known as the front foot rate and be determined by multiplying the rate per foot by the number of feet the property owner has fronting on the local collector sewer line from which he or she will receive service. The front foot rate shall be as follows:

- (a) Domestic User: \$80.00;
- (b) Commercial or Industrial User;

- 1. The same as a domestic user if the connection is made to a local collector sewer line eight (8) inches or less in diameter.
- 2. For a line larger than eight (8) inches in diameter: \$109.00.

This charge will be annually reviewed and may change to reflect the current average cost of installation of local collector sewer lines.”

Section 2. That Section 2.96(1) of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

“(1) When a property owner or user is requested or required to connect to the System and has not previously paid or been assessed a connection fee, the following connection fee schedule shall apply:

Integrated Sewer Connection Base Fee Schedule

Water Meter
(or equivalent)

<u>Size (inches)</u>	<u>Base Fee</u>
3/4 or less	\$2,873
1	\$4,798
1 ½	\$9,567
2	\$15,313
3	\$33,528
4	\$60,333
6 and over	\$134,083”

Section 3. That Section 2.101 of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"2.101 Rates and Charges for Retail Users Within the City of Grand Rapids.

The following rates and charges for sewage disposal service shall apply for users within the City of Grand Rapids:

Commodity Rate

Domestic	\$3.21 per 100 cubic feet
Commercial	\$3.21 per 100 cubic feet
Industrial	\$3.21 per 100 cubic feet

Monthly Service Charge

<u>Size of Meter</u>	<u>Charge</u>
3/4 inch or less	\$14.40
1 inch	23.36
1 1/4 inches	34.88
1 1/2 inches	48.96
2 inches	84.80
3 inches	187.20
4 inches	330.56
6 inches or larger	740.16"

Section 4. That Section 2.102 of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

“2.102 Surcharges and Permit Fees.

- (1) If the City Manager determines that a discharge will not cause pass through or interference as defined in this Chapter, Industrial or Commercial users whether they are located within a retail service area or a bulk service area shall be charged a surcharge if the concentration of their discharge exceeds a five-day BOD of two hundred fifty (250) mg/l, and/or TSS of two hundred fifty (250) mg/l, or any phosphorus of fifteen (15) mg/l. That charge shall be twenty-one and five-tenth cents (\$0.215) per pound of BOD and thirty-three and eight-tenth cents (\$0.338) per pound of TSS and two dollars and six and two-tenth cents (\$2.062) per pound of phosphorus in excess of the above limits. In addition, all industrial or commercial users shall be charged a surcharge for ammonia concentrations exceeding thirty-eight (38) mg/l. The charge shall be twenty nine and five-tenth cents (\$0.295) per pound of ammonia in excess of the above limit. Discharge concentrations of these substances and the resulting surcharge shall be based on at least three composite samples per quarter. This sampling shall be performed by either the City or the Industrial User as determined by the City Manager.
- (2) The fee for a Significant Industrial User Discharge Permit as provided for in Section 2.70 of this Chapter whether they are located within a retail service area or a bulk service area shall be four hundred dollars (\$400.00) per year and an analytical fee based upon Section 2.102(3).
- (3) The following schedule of charges shall apply to any analysis which may be required as a part of a Significant Industrial User Discharge Permit:

Metals	\$7.00 each
TSS	\$7.00 each
BOD	\$14.00 each
Total Phosphate	\$13.50 each
pH	\$5.00 each
EPA 624	\$60.00 each
EPA 625	\$115.00 each
BTEX/MTBE	\$35.00 each
Sulfide	\$12.00 each
Oil and Grease	\$25.00 each
Total Cyanide	\$15.00 each
Hexavalent Chromium	\$10.00 each
Fecal Coliform	\$25.00 each

Mercury	\$15.00 each
Ammonia	\$9.00 each
Labor	\$57.57 hour
Sampler	\$35.00 day
Vehicle	\$4.01 hour

- (4) These charges will be reviewed annually and may change to reflect the current cost of providing these services."

Section 5. That Section 2.102.1 of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"Sec. 2.102.1 Miscellaneous Charges

- (1) Sewer Lateral Charges,** as reflected in Task #29 of the 2013 Sewer Rate Study:

<u>R.O.W. WIDTH</u>	<u>COST FOR 6-INCH LATERAL</u>	
	<u>2013</u>	<u>2014</u>
50 ft.	\$2,150	\$2,400
60 ft.	\$2,550	\$2,850
66 ft.	\$2,800	\$3,100
80 ft.	\$3,350	\$3,650
100 ft.	\$4,100	\$4,500

- (2) Sewer Oversizing Rates,** as reflected in Task #32 of the 2013 Sewer Rate Study:

<u>Description</u>	<u>Amount (per lineal foot)</u>
8" to 10"	\$6.62
8" to 12"	\$12.14
8" to 15"	\$21.83
10" to 12"	\$5.52
10" to 15"	\$15.21
12" to 15"	\$9.69

- (3) Footing Drain Disconnect Opt Out Charge,** as reflected in Task #35 of the 2013 Sewer Rate Study, and as authorized by Section 2.115 of this Code:

\$73.40/customer/month"

Section 6. That Section 2.105 of Chapter 27 of Title II of the Code of the City of Grand Rapids be amended to read as follows:

"Sec. 2.105 Effective Date

The rates, charges, and fees set forth in Section 2.95(2), 2.96(1), 2.101, 2.102, 2.102.1, and 2.105 shall be effective on January 1, 2014."

Carried by a roll call vote: Yeas: -6 Nays: -0

Com. White, supported by Com. Gutowski, moved that the ordinance take immediate effect pursuant to Section 9 of Title V of the City Charter.

Adopted: Yeas: -6 Nays: -0

I hereby certify that the foregoing is a true transcript of the action of the City Commission of the City of Grand Rapids, Michigan, in public session held December 17, 2013.


 Darlene O'Neal, Acting City Clerk




CITY OF GRAND RAPIDS AGENDA ACTION REQUEST

DATE: December 10, 2013

TO: Gregory A. Sundstrom, City Manager

COMMITTEE: Committee of the Whole

LIAISON: Greg Sundstrom, City Manager

FROM: Geri D. Eye, CPA, Utility Financial Officer 

SUBJECT: **2014 CUSTOMER COMMUNITY WATER/SEWER RATES
FINAL APPROVAL OF RESOLUTION**

The 2013 Preliminary Water/Sewer Rate Study recommended water and sewer rate adjustments as of January 1, 2014, for Grand Rapids and each customer community served by the water supply and sewage disposal systems. City Commission approval of rate adjustments for customer communities is required through resolution.

Utility Advisory Board (UAB) partners and other customer communities were notified of the recommended rate adjustments on November 14, 2013. The water and sanitary sewer service agreements provide the communities with a thirty-day comment period following the notification of rate adjustments. While no comments were received, both Wright and Grand Rapids townships each independently elected to contribute \$10,000 and \$3,200, respectively, to reduce sewer rates effective January 1, 2014.

In summary, Water Supply System revenue requirements reflect a decrease of \$1,735,395 or 4.30% less than revenues generated by existing rates and charges, and Sewage Disposal System revenue requirements reflect an increase of \$1,177,402 or 2.46% more than revenues generated by existing rates and charges.

The attached resolution approves the recommended water and sewer rates for the City's retail and wholesale communities for calendar year 2014. A summary of water and sewer revenue requirements changes and a rate schedule for each customer community is attached to the resolution.

Attachments

cc: Eric DeLong, Deputy City Manager
Scott Buhner, Chief Financial Officer
Pamela Ritsema, Managing Director Enterprise Services
Joellen Thompson, Water System Manager
Michael Lunn, Environmental Services Manager
Wayne Jemberg, Water System Assistant Manager
Charles Schroeder, Environmental Services Assistant Manager

YOUR COMMITTEE OF THE WHOLE recommends adoption of the following resolution approving the attached adjusted water and sewer rates in accordance with the 2013 water/sewer rate review.

CORRECT IN FORM

DEPARTMENT OF LAW

COMMITTEE OF THE WHOLE

Com. _____, supported by Com. _____, moved adoption of the following resolution:

WHEREAS, the Water-Sewer rate studies have been undertaken and completed for the years 1976 through 2012, and,

WHEREAS, the 2013 Water-Sewer Rate Review has been completed using the same general methodology as the 1976 through 2012 Water-Sewer Rate Studies, as adjusted where appropriate for the uniform water and sewer service agreements.

RESOLVED, that the attached water and sewer rates are approved and shall be effective January 1, 2014.

FURTHER, RESOLVED, that the Acting City Clerk is directed to notify the contractual water and sewer service customers in writing of the water and sewer rates, and the Mayor and Acting City Clerk are authorized to take any other action as may be required to evidence the new water and sewer rates.

DRAFTED BY: Geri D. Eye, CPA, Utility Financial Officer

**CITY OF GRAND RAPIDS, MICHIGAN
2013 FINAL WATER/SEWER RATE STUDY
SUMMARY OF REVENUE REQUIREMENT CHANGES
FOR RATES EFFECTIVE JANUARY 1, 2014
December 10, 2013**

	<u>WATER (1)</u>		<u>SEWER (1)</u>	
	<u>AMOUNT</u>	<u>PERCENT</u>	<u>AMOUNT</u>	<u>PERCENT</u>
GRAND RAPIDS	\$ (965,560)	-4.03%	\$ 738,617	2.25%
WALKER	(124,627)	-3.88%	108,859	2.36%
KENTWOOD	(227,165)	-5.29%	98,572	2.74%
CASCADE TWP	(118,885)	-3.88%	54,928	2.74%
GRAND RAPIDS TWP (2)	(96,174)	-4.42%	60,072	2.60%
TALLMADGE TWP	(5,055)	-3.88%	7,111	2.74%
WRIGHT TWP	NA	NA	(3,231)	-1.31%
EAST GRAND RAPIDS	(55,853)	-6.16%	67,271	11.11%
ADA TWP	(92,563)	-7.32%	27,471	2.50%
OTTAWA COUNTY	(49,514)	-3.54%	NA	NA
GAINES TWP	NA	NA	4,532	3.12%
SYSTEM	\$ (1,735,395)	-4.30%	\$ 1,177,402	2.46%

(1) Change in revenue requirements based on revenues currently generated from rates, customer base and volumes reported in the preliminary rate study (Includes consideration for relief from CCCC.B).

(2) Grand Rapids Twp contributed \$5,600 in 2012 Rate Study for 2013 sewer revenue requirements & rates.

DISCLOSE RELIEF PROVIDED BY CITY & CUSTOMER COMMUNITY CIRCUIT BREAKER (CCCCB)

	<u>WATER</u>		<u>SEWER</u>	
	<u>AMOUNT</u>	<u>PERCENT</u>	<u>AMOUNT</u>	<u>PERCENT</u>
SYSTEM CHANGE- ABOVE	\$ (1,735,395)	-4.30%	\$ 1,177,402	2.46%
ADD: CCCC.B RELIEF	168,143	0.42%	133,698	0.28%
SYSTEM CHANGE- WITHOUT RELIEF	<u>\$ (1,567,252)</u>	<u>-3.88%</u>	<u>\$ 1,311,100</u>	<u>2.74%</u>

APPROVAL OF CUSTOMER COMMUNITY RATES

***83073** Com. Gutowski, supported by Com. Bliss, moved adoption of the following resolution under the Consent Agenda:

WHEREAS, the Water-Sewer rate studies have been undertaken and completed for the years 1976 through 2012; and


WHEREAS, the 2013 Water-Sewer Rate Review has been completed using the same general methodology as the 1976 through 2012 Water-Sewer Rate Studies, as adjusted where appropriate for the uniform water and sewer service agreements; therefore

RESOLVED, that the attached water and sewer rates are approved and shall be effective January 1, 2014.

FURTHER RESOLVED, that the Acting City Clerk is directed to notify the contractual water and sewer service customers in writing of the water and sewer rates, and the Mayor and Acting City Clerk are authorized to take any other action as may be required to evidence the new water and sewer rates.

* CONSENT AGENDA APPROVAL

I hereby certify that the foregoing is a true transcript of the action of the City Commission of the City of Grand Rapids, Michigan, in public session held December 17, 2013.



Darlene O'Neal, Acting City Clerk

CUSTOMER COMMUNITY RATE NOTIFICATION LETTER

CITY CLERK



CITY OF GRAND RAPIDS

December 20, 2013

Ms. Sarah Bydalek, City Clerk
City of Walker
4243 Remembrance Road NW
Grand Rapids, MI 49504

Dear Sarah:

The "2013 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer services.

Customer communities were electronically notified of the recommended rate changes on November 14, 2013, followed by a thirty-day comment period. Additionally, rate review meetings were held on November 20 and 21, 2013, with customer communities.

On December 17, 2013, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2014. A certified copy of the resolution and the approved rate schedules for the City of Walker are attached for your information.

If you need any further information, please call me at 456-3014.

Sincerely,

Darlene O'Neal
Acting City Clerk

DO/pas

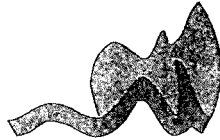
Enclosures

cc: Tom Almonte, Assistant to the City Manager
Geri D. Eye, CPA, Utility Financial Officer

LAURI S. PARKS, CITY CLERK
300 MONROE AVENUE, N.W., GRAND RAPIDS, MICHIGAN 49503
TELEPHONE (616) 456-3010 • FAX (616) 456-4607

CUSTOMER COMMUNITY RATE NOTIFICATION LETTER

CITY CLERK



CITY OF GRAND RAPIDS

December 20, 2013

Mr. Dan Kasunic, Clerk
City of Kentwood
4900 Breton Avenue SE
Kentwood, MI 49518-8848

Dear Dan:

The "2013 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer services.

Customer communities were electronically notified of the recommended rate changes on November 14, 2013, followed by a thirty-day comment period. Additionally, rate review meetings were held on November 20 and 21, 2013, with customer communities.

On December 17, 2013, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2014. A certified copy of the resolution and the approved rate schedules for the City of Kentwood are attached for your information.

If you need any further information, please call me at 456-3014.

Sincerely,

Darlene O'Neal
Acting City Clerk

DO/pas

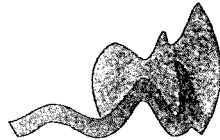
Enclosures

cc: Tom Almonte, Assistant to the City Manager
Geri D. Eye, CPA, Utility Financial Officer

LAURI S. PARKS, CITY CLERK
300 MONROE AVENUE, N.W., GRAND RAPIDS, MICHIGAN 49503
TELEPHONE (616) 456-3010 • FAX (616) 456-4607

CUSTOMER COMMUNITY RATE NOTIFICATION LETTER

CITY CLERK



CITY OF GRAND RAPIDS

December 20, 2013

Mr. Ronald Goodyke, Clerk
Cascade Charter Township
2865 Thornhills SE
Grand Rapids, MI 49546-7192

Dear Mr. Goodyke:

The "2013 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer services.

Customer communities were electronically notified of the recommended rate changes on November 14, 2013, followed by a thirty-day comment period. Additionally, rate review meetings were held on November 20 and 21, 2013, with customer communities.

On December 17, 2013, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2014. A certified copy of the resolution and the approved rate schedules for Cascade Charter Township are attached for your information.

If you need any further information, please call me at 456-3014.

Sincerely,

Darlene O'Neal
Acting City Clerk

DO/pas

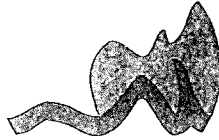
Enclosures

cc: Tom Almonte, Assistant to the City Manager
Geri D. Eye, CPA, Utility Financial Officer

LAURI S. PARKS, CITY CLERK
300 MONROE AVENUE, N.W., GRAND RAPIDS, MICHIGAN 49503
TELEPHONE (616) 456-3010 • FAX (616) 456-4607

CUSTOMER COMMUNITY RATE NOTIFICATION LETTER

CITY CLERK



CITY OF GRAND RAPIDS

December 20, 2013

Mr. Ed Robinette, Clerk
Grand Rapids Charter Township
1836 East Beltline NE
Grand Rapids, MI 49525

Dear Ed:

The "2013 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer services.

Customer communities were electronically notified of the recommended rate changes on November 14, 2013, followed by a thirty-day comment period. Additionally, rate review meetings were held on November 20 and 21, 2013, with customer communities.

On December 17, 2013, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2014. A certified copy of the resolution and the approved rate schedules for Grand Rapids Township are attached for your information.

If you need any further information, please call me at 456-3014.

Sincerely,

Darlene O'Neal
Acting City Clerk

DO/pas

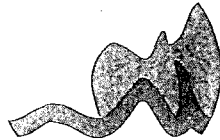
Enclosures

cc: Tom Almonte, Assistant to the City Manager
Geri D. Eye, CPA, Utility Financial Officer

LAURI S. PARKS, CITY CLERK
300 MONROE AVENUE, N.W., GRAND RAPIDS, MICHIGAN 49503
TELEPHONE (616) 456-3010 • FAX (616) 456-4607

CUSTOMER COMMUNITY RATE NOTIFICATION LETTER

CITY CLERK



CITY OF GRAND RAPIDS

December 20, 2013

Ms. Lenore Cook, Clerk
Tallmadge Township Offices
0-1451 Leonard Street NW
Grand Rapids, MI 49504

Dear Ms. Cook:

The "2013 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer services.

Customer communities were electronically notified of the recommended rate changes on November 14, 2013, followed by a thirty-day comment period. Additionally, rate review meetings were held on November 20 and 21, 2013, with customer communities.

On December 17, 2013, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2014. A certified copy of the resolution and the approved rate schedules for Tallmadge Township are attached for your information.

If you need any further information, please call me at 456-3014.

Sincerely,

Darlene O'Neal
Acting City Clerk

DO/pas

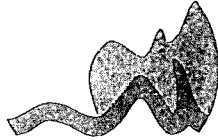
Enclosures

cc: Tom Almonte, Assistant to the City Manager
Geri D. Eye, CPA, Utility Financial Officer

LAURI S. PARKS, CITY CLERK
300 MONROE AVENUE, N.W., GRAND RAPIDS, MICHIGAN 49503
TELEPHONE (616) 456-3010 • FAX (616) 456-4607

CUSTOMER COMMUNITY RATE NOTIFICATION LETTER

CITY CLERK



CITY OF GRAND RAPIDS

December 20, 2013

Ms. Linda Way, Township Clerk
Wright Township
1565 Jackson
P.O. Box 255
Marne, MI 49435

Dear Ms. Way:

The "2013 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer services.

Customer communities were electronically notified of the recommended rate changes on November 14, 2013, followed by a thirty-day comment period. Additionally, rate review meetings were held on November 20 and 21, 2013, with customer communities.

On December 17, 2013, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2014. A certified copy of the resolution and the approved rate schedules for Wright Township are attached for your information.

If you need any further information, please call me at 456-3014.

Sincerely,

Darlene O'Neal
Acting City Clerk

DO/pas

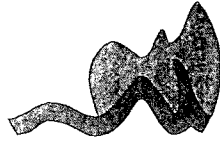
Enclosures

cc: Tom Almonte, Assistant to the City Manager
Geri D. Eye, CPA, Utility Financial Officer

LAURI S. PARKS, CITY CLERK
300 MONROE AVENUE, N.W., GRAND RAPIDS, MICHIGAN 49503
TELEPHONE (616) 456-3010 • FAX (616) 456-4607

CUSTOMER COMMUNITY RATE NOTIFICATION LETTER

CITY CLERK



CITY OF GRAND RAPIDS

December 20, 2013

Ms. Karen Brower, Clerk
City of East Grand Rapids
750 Lakeside Drive SE
East Grand Rapids, MI 49506

Dear Karen:

The "2013 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer services.

Customer communities were electronically notified of the recommended rate changes on November 14, 2013, followed by a thirty-day comment period. Additionally, rate review meetings were held on November 20 and 21, 2013, with customer communities.

On December 17, 2013, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2014. A certified copy of the resolution and the approved rate schedules for the City of East Grand Rapids are attached for your information.

If you need any further information, please call me at 456-3014.

Sincerely,

Darlene O'Neal
Acting City Clerk

DO/pas

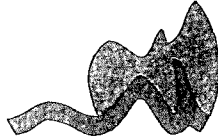
Enclosures

cc: Tom Almonte, Assistant to the City Manager
Geri D. Eye, CPA, Utility Financial Officer

LAURI S. PARKS, CITY CLERK
300 MONROE AVENUE, N.W., GRAND RAPIDS, MICHIGAN 49503
TELEPHONE (616) 456-3010 • FAX (616) 456-4607

CUSTOMER COMMUNITY RATE NOTIFICATION LETTER

CITY CLERK



CITY OF GRAND RAPIDS

December 20, 2013

Ms. Susan Burton, Clerk
Ada Township
7330 Thornapple River Drive
P.O. Box 370
Ada, MI 49301

Dear Susan:

The "2013 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer services.

Customer communities were electronically notified of the recommended rate changes on November 14, 2013, followed by a thirty-day comment period. Additionally, rate review meetings were held on November 20 and 21, 2013, with customer communities.

On December 17, 2013, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2014. A certified copy of the resolution and the approved rate schedules for Ada Township are attached for your information.

If you need any further information, please call me at 456-3014.

Sincerely,

Darlene O'Neal
Acting City Clerk

DO/pas

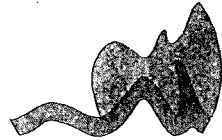
Enclosures

cc: Tom Almonte, Assistant to the City Manager
✓ Geri D. Eye, CPA, Utility Financial Officer

LAURI S. PARKS, CITY CLERK
300 MONROE AVENUE, N.W., GRAND RAPIDS, MICHIGAN 49503
TELEPHONE (616) 456-3010 • FAX (616) 456-4607

CUSTOMER COMMUNITY RATE NOTIFICATION LETTER

CITY CLERK



CITY OF GRAND RAPIDS

December 20, 2013

Mr. Ken Zarzecki
Director of Public Utilities
County of Ottawa
Board of County Road Commissioners
U.S. 31 at Rosy Mound Drive, P.O. Box 739
Grand Haven, MI 49417

Dear Mr. Zarzecki:

The "2013 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer services.

Customer communities were electronically notified of the recommended rate changes on November 14, 2013, followed by a thirty-day comment period. Additionally, rate review meetings were held on November 20 and 21, 2013, with customer communities.

On December 17, 2013, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2014. A certified copy of the resolution and the approved rate schedules for Ottawa County are attached for your information.

If you need any further information, please call me at 456-3014.

Sincerely,

Darlene O'Neal
Acting City Clerk

DO/pas

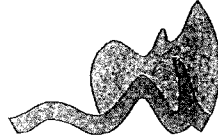
Enclosures

cc: Tom Almonte, Assistant to the City Manager
Geri D. Eye, CPA, Utility Financial Officer

LAURI S. PARKS, CITY CLERK
300 MONROE AVENUE, N.W., GRAND RAPIDS, MICHIGAN 49503
TELEPHONE (616) 456-3010 • FAX (616) 456-4607

CUSTOMER COMMUNITY RATE NOTIFICATION LETTER

CITY CLERK



CITY OF GRAND RAPIDS

December 20, 2013

Ms. Crystal Osterink, Clerk
Gaines Charter Township
8555 Kalamazoo Ave., S.E.
Caledonia, MI 49316-8270

Dear Crystal:

The "2013 Preliminary Water-Sewer Rate Study" recommended water and sewer rate adjustments for the City of Grand Rapids and each customer community contracting with the City of Grand Rapids for water and sewer services.

Customer communities were electronically notified of the recommended rate changes on November 14, 2013, followed by a thirty-day comment period. Additionally, rate review meetings were held on November 20 and 21, 2013, with customer communities.

On December 17, 2013, the Grand Rapids City Commission adopted a resolution to approve the new rates with an effective date of January 1, 2014. A certified copy of the resolution and the approved rate schedules for Gaines Charter Township are attached for your information.

If you need any further information, please call me at 456-3014.

Sincerely,

Darlene O'Neal
Acting City Clerk

DO/pas

Enclosures

cc: Tom Almonte, Assistant to the City Manager
Geri D. Eye, CPA, Utility Financial Officer

LAURI S. PARKS, CITY CLERK
300 MONROE AVENUE, N.W., GRAND RAPIDS, MICHIGAN 49503
TELEPHONE (616) 456-3010 • FAX (616) 456-4607

**CITY OF GRAND RAPIDS, MICHIGAN
2013 FINAL WATER/SEWER RATE STUDY
WATER & SEWER RATES FOR GRAND RAPIDS & RETAIL CUSTOMER COMMUNITIES
EFFECTIVE JANUARY 1, 2014**

WATER RATES

COMMODITY	METER CODE	GRAND RAPIDS	WALKER	KENTWOOD	CASCADE	GR. RAPIDS TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP
CHARGE (HCF)		\$ 1.70	\$ 1.57	\$ 1.52	\$ 2.08	\$ 1.71	\$ 3.53	NA
MONTHLY SERVICE CHARGE BY METER SIZE								
3/4" & Less	A	\$ 9.50	\$ 11.90	\$ 14.02	\$ 19.34	\$ 14.74	\$ 6.77	NA
1"	B	\$ 14.66	\$ 18.92	\$ 22.69	\$ 32.15	\$ 23.97	\$ 9.80	NA
1-1/4"	C	\$ 21.29	\$ 27.95	\$ 33.84	\$ 48.62	\$ 35.84	\$ 13.70	NA
1-1/2"	D	\$ 29.39	\$ 38.99	\$ 47.47	\$ 68.75	\$ 50.35	\$ 18.47	NA
2"	E	\$ 50.02	\$ 67.08	\$ 82.16	\$ 119.99	\$ 87.28	\$ 30.60	NA
3"	F	\$ 108.95	\$ 147.35	\$ 181.27	\$ 266.39	\$ 192.79	\$ 65.27	NA
4"	G	\$ 191.46	\$ 259.72	\$ 320.03	\$ 471.35	\$ 340.51	\$ 113.80	NA
6" & Over	H	\$ 427.19	\$ 580.79	\$ 716.47	\$ 1,056.95	\$ 762.55	\$ 252.47	NA

SEWER RATES

COMMODITY	METER CODE	GRAND RAPIDS	WALKER	KENTWOOD	CASCADE	GR. RAPIDS TOWNSHIP	TALLMADGE TOWNSHIP	WRIGHT TOWNSHIP
CHARGE (HCF)		\$ 3.21	\$ 2.68	\$ 2.30	\$ 2.57	\$ 2.34	\$ 10.53	NA
REU Charge (Monthly) *		NA	NA	NA	NA	NA	NA	\$ 61.07
MONTHLY SERVICE CHARGE BY METER SIZE								
3/4" & Less	A	\$ 14.40	\$ 29.74	\$ 6.72	\$ 31.03	\$ 27.28	\$ 33.20	NA
1"	B	\$ 23.36	\$ 50.63	\$ 9.71	\$ 52.93	\$ 46.26	\$ 56.78	NA
1-1/4"	C	\$ 34.88	\$ 77.49	\$ 13.55	\$ 81.08	\$ 70.66	\$ 87.10	NA
1-1/2"	D	\$ 48.96	\$ 110.32	\$ 18.24	\$ 115.48	\$ 100.48	\$ 124.16	NA
2"	E	\$ 84.80	\$ 193.88	\$ 30.19	\$ 203.06	\$ 176.39	\$ 218.49	NA
3"	F	\$ 187.20	\$ 432.64	\$ 64.32	\$ 453.28	\$ 393.28	\$ 488.00	NA
4"	G	\$ 330.56	\$ 766.90	\$ 112.11	\$ 803.59	\$ 696.92	\$ 865.31	NA
6" & Over	H	\$ 740.16	\$ 1,721.92	\$ 248.64	\$ 1,804.48	\$ 1,564.48	\$ 1,943.36	NA

* REU - Residential Equivalent Unit (Wright Township Only)

FIRE PROTECTION RATES- ALL GOVERNMENTAL UNITS

6"	H	\$ 16.00	10"	J	\$ 44.48
8"	I	\$ 28.40	12"	K	\$ 64.00

NOTE: Monthly defined as 1/12th of 365 days.

**CITY OF GRAND RAPIDS, MICHIGAN
2013 FINAL WATER/SEWER RATE STUDY
WATER & SEWER RATES FOR WHOLESALE CUSTOMER COMMUNITIES
EFFECTIVE JANUARY 1, 2014**

	<u>2014</u>
EAST GRAND RAPIDS	
WATER - SERVICE (MONTHLY)	\$ 14,091.00
- COMMODITY (100 CF)	1.12
SEWER - SERVICE (MONTHLY)	1,540.00
- COMMODITY (MG)	1,558.00
 ADA TWP	
WATER - SERVICE	\$ 29,726.00
- COMMODITY	1.25
SEWER - SERVICE	42,700.00
- COMMODITY	1,975.00
 OTTAWA COUNTY	
WATER - SERVICE	\$ -
- COMMODITY	1.22
 GAINES TWP	
SEWER - SERVICE	\$ 1,333.00
- COMMODITY	1,387.00

NOTE : Monthly defined as 1/12th of 365 days.

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